Introduction

Course Goals

The goals for this course are for you to:

- Become familiar with the characteristics and uses of the SAM II Inventory Control reference tables
- Become familiar with the characteristics and uses of the SAM II Inventory Control documents
- Become familiar with the characteristics and uses of the SAM II Inventory Control inquiry tables
- Become familiar with the characteristics and uses of the SAM II Inventory Control batch processes and reports

Sign-on ID's

A generic user ID will be used in this course to sign on to the training application. The generic user IDs are to be used in the training region only. You will use your own user ID in Production.

Course Overview

- Inventory Overview
- Reference Tables
- Documents
- Inquiry Tables
- Batch Processes and Reports

Business Functions

This course covers the following functions in the *Inventory* Business Area:

 Warehouse	WHS2, WHSG, WHSE
 Stock Item	ABCP, COMT, INKY, ITMG, ITMS
 Combinations	INV3, INVN, INV2, INVI, KYWD
 Stock Requisition	ISSQ, SR, PI, CI
 Over-the-Counter	OC
 Stock Return	RETC, SN
 Open Item Tables	OISN, OSRH, OSRC, OSRL, OSRI, OSRR
 Stock Transfer	OTRH, OTRL, TI, TR
 Manufacturing	JOBT, MC, MN
 Inventory Adjustment	ADJC, IA
 Stock Replenishment	IREP, INVI

INVF

Terminology

Agency Code	Unique three-character code that identifies the agency name.
Annual Closing	Rolls back the historical information stored on Inventory Inquiry (INVN) for each item. Actual quantities are moved back one-year, leaving an empty array of 12 months for the forthcoming year of actual and forecasted quantities.
Autogeneration of Purchase Requisition and PG Documents	Aids in the automatic replenishment of warehouse stock. This program uses information already in the system to automatically generate orders such as Price Agreement Purchase Orders and/or requisitions. The program uses Inventory Replenishment (IREP) and the existing Replenishment Review Report to obtain this information.
Back Order Servicing	Attempts to fill backordered quantities of open stock requisitions. If stock replenishment has occurred since the stock requisition was originally processed, the on-hand quantities may now be sufficient to allow reservation of the backordered quantities.
Closed Transactions Table Purge	Purges closed Stock Requisitions (SR) and Over the Counter (OC) documents from the open stock requisition tables. Also, closed stock transfer receipts are purged from the open stock transfer tables. If the **Mark for Future Deletion** indicator is selected on Inventory (3 of 3) (INV3), and no open items exist (PCQs, SRs, etc.) for an Inventory Inquiry (1 of 3) (INVN) record, these items are purged from Inventory Inquiry (1 of 3) (INVN).

Commodity Code	A unique code that identifies a specific commodity that has been established in SAM II. A commodity code must be assigned within the system before the related item may be requisitioned or purchased. The commodity code has the following format: 3 digit class code 2 digit subclass code 2 digit item code 3 digit detailed item code 1 system assigned check digit
Commodity Code Description	A maximum sixty (60) character description in SAM II that describes a commodity.
Commodity Keyword	A descriptive value (maximum 60 characters) for the purpose of cross-referencing a commodity.
Current Year	The present fiscal period as opposed to past and future periods. SAM II maintains actual year-to-date and planned expenditure information for the current year.
Date of Record – Receiver Document (RC)	Default is the date the document is accepted. The date (mm dd yy) entered reflects when the order was received.
Document Number	Generic element used in multipurpose records that may contain information pertaining to various types of documents such as bid solicitation documents, purchase orders, contracts, delegations of authority, etc. It serves as the identification number of the document contained in the record. The document reference number also provides an audit trail from the input document, through the effect upon the accounting ledgers, to the system reports.

Economic Order Quantity (EOQ) Reorder Point	Calculated with user-specified EOQ parameters stored on the ABC Classification Parameter (ABCP) table.
Encumbrance (or Encumbered)	An obligation in the form of a purchase order, contract release order, or encumbrance request for which a part of an appropriation is reserved. An encumbrance is closed-out when it is liquidated by the related expenditure or when it is canceled.
Field	An assigned area on a document or record that contains an element of information. A field is the smallest logical element of information or data that requires identification within the system.
Fiscal Period	Any period at the end of which a governmental unit determines its financial position and the results of its operation.
Fiscal Year	A twelve-month period of time to which the annual budget applies and at the end of which a governmental unit determines its financial position and the results of its operation. The fiscal year in Missouri is the period from July 1 to June 30.
Forecast Demand Calculation	Based on historical issues and forecasted demand. This routine reads Inventory (2 of 3) (INV2) and calculates and updates the forecasted demand for each stock item.
Fund	An independent fiscal and accounting entity with a self-balancing set of accounts, recording cash and/or other assets, together with all related liabilities, obligations, reserves, and fund balances, that are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with constitutional and legislative requirements, special regulations, restrictions, or limitations.

Grant	A contribution by one entity to another, normally between governmental units. The contribution is usually made to aid in the support of expenditures for a specified purpose or purposes and sometimes for general purposes. Grants are identified in SAM II using the 4-character Reporting Category field.
Inventory Adjustment (IA) (Seller Expense)	The managing warehouse may need to adjust the on-hand quantities or the unit costs of stock items in inventory. If quantity and/or unit cost are increased, the net accounting effect of this event is an increase in inventory balances with a decrease in expense to the seller. If there is a decrease in quantity and/or unit cost, the net accounting effect is a decrease in inventory balances and an increase in expense to the seller. Allows warehouse management to adjust quantities on unit values of on-hand items due to a change in on-hand quantities or unit costs. These adjustments alter inventory and cost of goods expense balances.
Inventory Management Classifications	Used to group items with similar management needs, i.e. big ticket items, office supplies, etc.
Lead Time	The number of days elapsed between placing an order and receiving an order.
Lead Time Adjustment	The additional number of days the inventory manager sets up on ABC Classification Parameter (ABCP) to allow for unexpected delays.
Lead Time Calculation	Is based on a number of previously processed purchase requisitions, purchase orders, and receipt of goods. The requisition and vendor lead-time is calculated for each active stock item in inventory.

Manual Demand	Forecasted using detailed analysis of a stock item's usage (e.g. sophisticated forecasting and simulation techniques using PC-based programs outside of SAM II) and then manually uploaded to the Inventory Inquiry (2 of 3) (INV2) table Reorder Information screen.
Manual Reorder Point	Calculated using detailed analysis of a stock item's usage (e.g. sophisticated forecasting and simulation techniques using PC-based programs outside of SAM II) and then manually uploaded to the Inventory Inquiry (2 of 3) (INV2) table Reorder Information screen.
Non-Seasonal Demand	Forecasted based on the monthly moving average of actual demand in a user-specified previous number of months, stored on the ABC Classification Parameter (ABCP) table.
Object	The four-digit code that identifies the source of revenue or the type of goods or services acquired through an expenditure. In SAM II the standard object codes are defined in the Statewide Chart of Accounts. Object codes in SAM II are assigned on a statewide basis (i.e., no unique codes exist for individual departments/agencies).
Order-Up-To Amount Reorder Point	Calculated with user-specified safety stock factors specified on the ABC Classification Parameter (ABCP) table, as well as system calculated forecasted demand statistical information.

Over the Counter (OC) (Buyer Expenditure, Seller Revenue)	A direct issue of requested stock items from inventory, an OC recognizes the same net accounting events involved with an Issue Confirmation (CI). Dr Expense Type (Account Type 24) Cr Inventory (Account Type 01) Issues requested items directly from the on-hand quantity. As the items are issued immediately upon request, in effect, "over the counter", backordering is not allowed. Any request for items unavailable for immediate issuance must be reserved through a Stock Requisition (SR). On-hand quantity is reduced by the amount issued.
Parent/Child Relationship	Pertains to warehouses. Each "parent" warehouse or central warehouse may consist of one or more satellite warehouses, or "children".
Parent/Toolbox Stock Item	The relationship between two or more inventory items. For example, a toolkit could be established as a "parent" item, and a hammer, wrench, and screwdriver could be designated as "child" items within the parent item.
Parent Item	Stock items are grouped in a parent/child relationship. The parent item indicates the types of child items contained within the group. For example, a user might define a stock item called toolkit (parent). This group might contain a quantity of one each of the "child" items such as hammer, wrench, and screwdriver. Parent/child relationships are set up in Item Group (ITMG). While items must be purchased into inventory at the child item level, they may be issued from inventory at the parent level.

Physical Inventory Freeze	Is based on selection criteria. Stock items are flagged and frozen for the physical inventory count. While frozen, these items cannot be issued from the warehouse. A list of frozen items is produced to use during the count.
Physical Inventory Reconciliation Posting	Updates the on-hand quantity in Inventory Inquiry (1 of 3) (INVN) to reflect the actual inventory counts and posts entries to the General Ledger to adjust for stock overages and/or shortages.
Pick and Issue (PI)	This process prints a pick ticket and generates an associated Issue Confirmation (CI) document for each Stock Requisition (SR) that has a reserved stock item. Schedules previously reserved items to be picked up for delivery and releases them from a reserved status. This function is performed by creating a Pick Ticket Report (IN80). From this report, the warehouse can determine the stock item, the quantity, and the bin number of the items that are to be picked up.
Project	A planned undertaking, specific jobs, assignments or tasks. It generally involves non-recurring activities (such as construction projects), but can also include recurring tasks for which detailed information is desired (such as audits, data processing costs, etc.). A project can cover multiple fiscal years. Projects are identified in SAM II by use of an eight-digit project or job code.
Project Number	A number assigned by the department to internally identify the project.
Quantity Received	The number of items received. It should be stated in terms of the "units" received.

Receiver (RC)	Receiver (RC) documents have no accounting consequences. They are used to record the receipt of goods (commodities) against specific order commodity lines. The receipt of goods is one segment of the Three-Way Match process. Inventory goods must have all 3 components (Purchase Order, Vendor Invoice, and Receiver) of the Three-Way Match process in order to pay the vendor. In addition to recording the quantity of goods delivered, the receiver computes the dollar value of the goods received by multiplying quantity received by ordered unit cost. This facilitates the three-way match comparison.
Reorder Level	To maintain the current level of service, this is the minimum quantity of items that should be on-hand before reordering.
Reorder Point Calculation	Calculates the safety stock and reorder level for each item in inventory. Reorder quantity is either the order-up-to quantity minus the on-hand quantity, or is calculated by the Economic Order Quantity (EOQ) model.
Reorder Quantity	The quantity, in inventory units, that should be ordered for the next month.

Reorder This Amount	(Differs from Reorder Quantity on Replenishment Review Report). This is the actual quantity specified on the purchase order. It differs from the Reorder Quantity only when a multiplier greater than 1 is on Inventory Inquiry (1 of 3) (INVN). For example, pencils are purchased by the box (one box contains 10 pencils), but issued individually. Therefore, on Inventory (3 of 3) (INV3) the **Purchase Unit** equals **Box**, the **Issue Unit** equals **Each**, the **Smaller Unit** should be set to **Issue**, and the **Multiplier** equals **10**. For this particular stock item, the Replenishment Review Report might indicate that your Reorder Quantity should equal **20**, but your Reorder this Quantity would equal **2**. The system converts purchase units into inventory units before updating the inventory tables. If your **Smaller Unit** was equal to **Purchasing**, the Reorder this Quantity would equal **200**.
Requisition (Pre-Encumbrance)	A request for procurement represents the intent to incur an obligation. They are recorded in the accounting system as pre-encumbrances. Even though requisitions do not represent legal obligations of an entity, they serve as reductions to the available budget balance for requisitions when budgetary controls are being used.
Requisition Lead Time	The number of days elapsed between creating the requisition to Purchase an item into inventory and when the purchase order is actually created.
Return Code	Defines the reason a stock item was returned.

Safety Stock Factor (SSF)	A numeric factor controlling the level of service within an ABC classification. For example, a safety stock factor of 1.00 calculates a Reorder Quantity that provides a sufficient on-hand-quantity to immediately fill 78.81% of all Stock Requisitions (SR) referencing a stock item belonging to this ABC classification.
Safety Stock Quantity (SS)	A buffer for fluctuations in demands, a safety stock quantity is usually maintained to safeguard against unexpected demands and variations (increase) in expected lead-time. The safety stock quantity is calculated as follows: SS equals SSF multiplied by MAD where: SS equals Safety Stock SSF equals Safety Stock Factor MAD equals Mean absolute deviation.
Seasonal Demand	Forecasted based on the monthly moving average of actual demand in a user-specified previous number of months, stored on the ABC Classification Parameter (ABCP) table, as well as system calculated seasonal factors.
Stock Issue Confirmation (CI)	Generated by the Pick and Issues (PI) document process. The CI document confirms that the requisitioned stock items have been removed form inventory and released to the requestor. Dr Expense Type (Account Type 24) Cr Inventory (Account Type 01)
Stock Item	The child item in the parent/child relationship. The stock item indicates the type of child item contained within the group. Items are purchased into inventory at the child item level.

Stock Item Codes	Identify commodities that are consumable inventory items. For Inventory purposes, stock item and commodity code are interchangeable terms.
Stock Requisition (SR) **(Pre-Encumbrance)**	A request for inventory stock represents the intent to incur an obligation. Requests for inventory stock can provide useful accounting information for internal management purposes and are recorded in the accounting system as pre-encumbrances. Though they do not represent legal obligations, they are reductions to the available budget balance when budgetary controls are being used. Reserves quantities of stock items from an on-hand supply for later delivery. This reduces the available quantity. If items are not immediately available, they may be backordered and later filled by having the Backorder Servicing program run.
Stock Return (SN) **(Revised Accounting at Issue)**	The return of stock items to inventory by the buyer results in reversing the accounting events that took place at the issuance of these items. A decrease in revenue for the seller and a decrease in expenditure/expense for the buyer are the net accounting effects. Allows the original buyer to return previously issued items. At the option of the issuing warehouse, a return charge may be imposed.
Stock Transfer Issue (TI)	This tracking process initiates the transfer of items from one warehouse to another and places items from an on-hand status to an in-transfer status.

Stock Transfer Receipt (TR) **(Transfer of Expense)**	As the transfer of stock items is recognized and received by the receiving warehouse, the expenditure previously incurred by the issuing warehouse is transferred to the receiving warehouse. The net accounting effect results in an increase in the available budget balances for the issuing warehouse and reduction in the available budget balance of the receiving warehouse. This transaction recognizes inventory and expenditure balances at cost. Recognizes the receipt of transfer items by the receiving warehouse. On-hand quantities of receiving/issuing warehouses are adjusted.
Unit of Measure (UNIT)	A specific Unit of Measure is referenced by documents to validate codes that abbreviate standard units of measure. You can define and report these units of measure using the UNIT table.
Unit Price	The price per unit of measure associated with a commodity or service ordered or requisitioned.
Vendor	An individual or organization that sells commodities or services to the State.
Vendor Lead Time	The number of days elapsed between the time the vendor purchase order is sent and the actual receipt of the goods.
Warehouse Codes	Identifies physical locations that are used to store inventory items.
Warehouse Hierarchies	The relationship established between two or more warehouses.

Processes

The SAM II Inventory Control system is designed to support the requisition processing, inventory management, purchasing, and physical inventory reconciliation functions of inventory management through a set of highly interactive capabilities. The design of the system is based on the following key objectives:

- To provide information on the availability of stocked items and the status of stocked requisitions
- To facilitate timely requisition processing
- To automatically record and service backorders
- To help minimize inventory investments consistent with service objectives by basing purchasing decisions on usage history
- To provide automated tools to assist servicing, purchasing, and management of the inventory
- To improve financial control of the inventory by chargebacks to the user organizations
- To improve financial control of the inventory by periodic reconciliation of the inventory balances with the physical counts

The system utilizes a set of user-maintained master tables, a set of system-maintained master tables, transaction document types, and off-line programs to meet these objectives. The system also creates inventory control management reports. These reports, batch programs, and transaction document types are explained in this course.

The following table provides a brief overview of the Inventory Control events as they are tracked in SAM II.

Action	Request for Stock Item	Issue Stock Item	Return Stock Item	Inventory Adjustment	Stock Item Transfer
Transaction	**Stock Requisition** (SR)	**Pick and Issue/Stock Issue Confirmation** (PI, CI) or **Over the Counter** (OC, MC)	**Stock Return** (SN, MN)	**Inventory Adjustment** (IA)	**Stock Transfer Issue** (TI) and **Stock Transfer Receipt** (TR)
Accounting Event	Pre-Encumbrance	Expense (Debit), Inventory (Credit)	Reverses issuance accounting events	Affects warehouse inventory balances	Affects warehouse inventory balances
Non-Accounting Event	Reserves Stock Item in Warehouse	Stock Item and Warehouse tracking	Stock Item and Warehouse tracking	Unit Cost or Quantity changed	Stock Item and Warehouse tracking

Life Cycle

1. Purchasing an Item to Restock Inventory

- Once a requested item has been bid and awarded to a vendor, a purchase order is issued
- Information from the purchase order is entered into SAM II using a Purchase Order document (PCQ, PDQ, or PGQ). Warehouse information is coded on the document

2. Receiving Items into Stock

- The Receiver (RC) transaction is used to record the receipt of stock items when they are received into a warehouse
- Once an RC document is accepted for an inventory item, the On-Hand and Available Quantities in the warehouse are updated

3a. Stock Requisition (SR) Transaction

- First step toward requisitioning an item from the inventory warehouse
- Reserves a specific quantity of items for issuing
- The items requested will eventually be released by the Pick and Issue (PI) Transaction that creates pick tickets for the items. The process is completed by the Issue Confirmation (CI) transaction. The issuing warehouse performs this last step.

- or -

3a. Over the Counter (OC)

- Assumes that the item will be ordered and issued on or near the same time
- The item cannot be issued if quantity on-hand is insufficient (i.e., backordering is not permitted)
- Minimum and maximum order quantity restrictions are not permitted

- The on-hand quantity is immediately reduced

3b. Pick and Issue (PI) Transaction

- Used to release items that have been reserved by an SR document
- Creates a Pick Ticket used to retrieve the requested items from the warehouse. The Pick Tickets list the quantity of items to retrieve, where they are located within the warehouse, and where they are to be delivered.
- Removes items from the *Reserved* status and places them in a *Released* status
- The PI document also creates an Issue Confirmation document (CI), to be processed once the requester has actually been issued the item
- PI and CI documents are not used for Over the Counter issues (OC and MC documents)

3c. Issue Confirmation (CI) Transaction

- Used to confirm the quantity issued to a requester
- Automatically generated from the Pick and Issue (PI) transaction

4. Stock Return (SN) Transaction

- Allows the user to return stock items previously issued from a warehouse
- A fee for returning stock items to the warehouse can be charged
- The Stock Return (SN) transaction will automatically reverse the accounting entries from the stock issue (OC/MC or CI)

5a. Stock Transfer Issue (TI) Transaction

- First step toward completing a transfer of stock from one warehouse to another
- Reserves a specific quantity of items for transfer

5b. Stock Transfer Receipt (TR) Transaction

- Used to complete a stock transfer from the issuing warehouse to the receiving warehouse
- Indicates the actual quantity received through the transfer
- The accounting entries to record the transfer are made through the Stock Transfer Receipt (TR) transaction

6. Inventory Adjustments (IA)

- Allows the user to adjust the on-hand quantity or the unit cost of a stock item
- Adjustments to make on-hand quantity or unit cost negative are not permitted

7a. Manufacturing Over the Counter (MC)

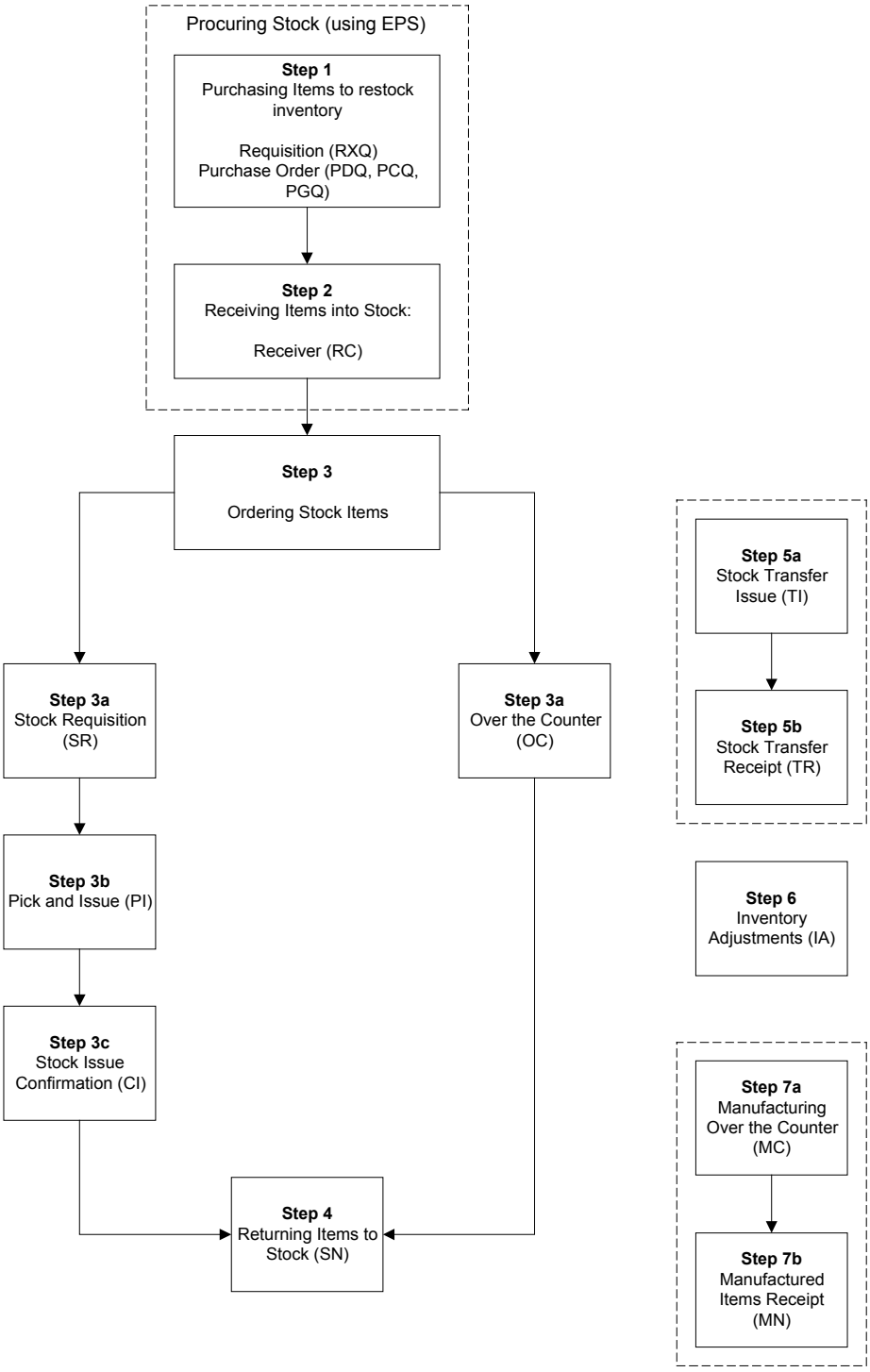
- Similar to OC
- Used to record consumption of raw materials used in the manufacture of other stock items

7b. Manufactured Items Receipt (MN)

- Similar to SN
- Used to enter newly created (manufactured stock created stock items back into warehouse inventory

These transactions validate data against reference tables and update various system-maintained tables and ledgers.

Flow of Items through Inventory



Reference Tables

Topic Objectives

After completing this topic, you will be able to:

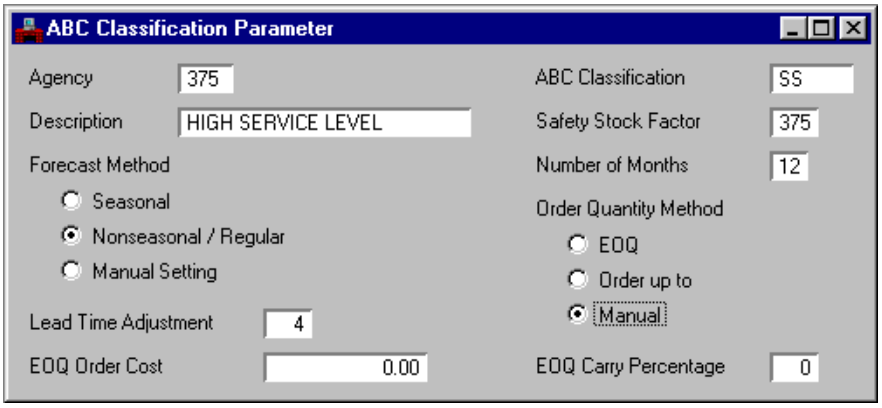
- Understand the reference tables used to validate data entered on inventory documents
- View the data maintained in reference tables

Topic Overview

Before any transactions can be entered and processed, users must enter data into user maintained tables. This topic introduces you to the following reference tables:

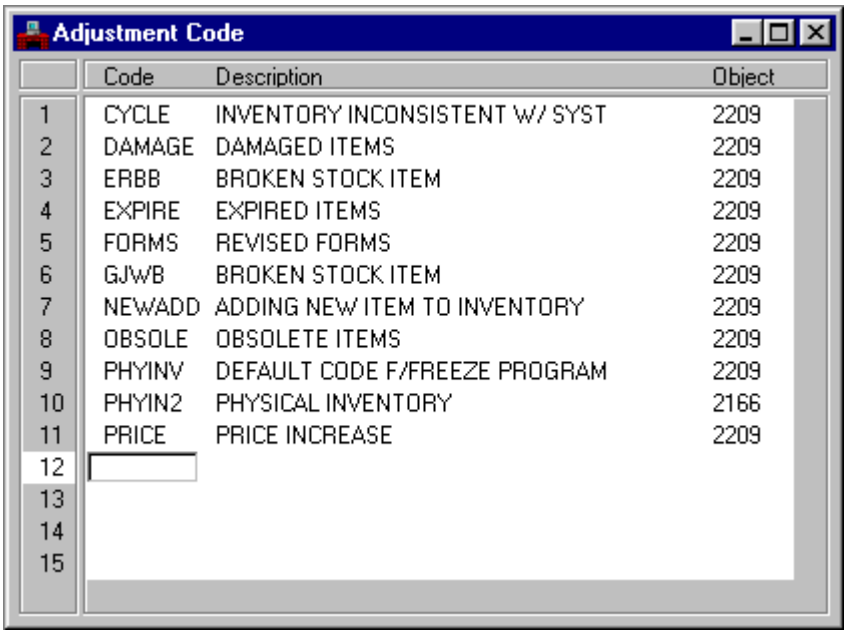
- ABC Classification Parameter (ABCP)
- Adjustment Code (ADJC)
- Commodity (COMT)
- Inventory by Keyword (INKY)
- Physical Inventory Freeze (INVF)
- Inventory Inquiry (2 of 3) (INV2)
- Inventory Inquiry (3 of 3) (INV3)
- Inventory Replenishment (IREP)
- Item Group (ITMG)
- Return Code (RETC)
- Warehouse Management (WHS2)
- Warehouse Group (WHSG)

ABC Classification Parameter (ABCP)



ABCP is used to set management parameters (i.e. forecast methods and order quantity methods) for stock items with similar management needs. Multiple ABC classifications can be defined for each agency (department). Whenever a stock item is entered in SAM II, it must have a valid ABC class associated with it. When the forecast and reordering jobs are run, calculations will be done based on the information stored on ABCP. This table is maintained by the inventory agency.

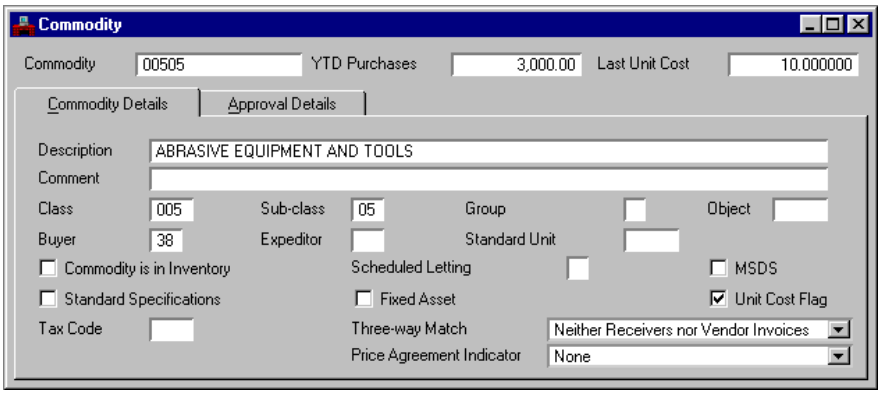
Adjustment Code (ADJC)



ADJC provides a list of valid adjustment codes with descriptions to define the reason for the adjustments to inventory. For each adjustment code, there is an object code to which the accounting entries are posted. These codes must be entered on Inventory Adjustment documents (IA). The Office of Administration maintains ADJC.

Note: ***PHYINV*** must be defined as a valid adjustment code. This code is used during the physical inventory reconciliation process.

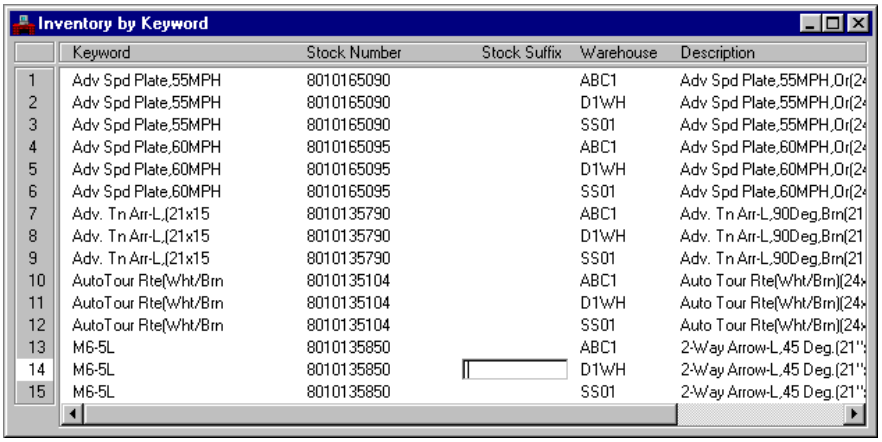
Commodity (COMT)



While not part of the Inventory Control Subsystem, the Commodity (COMT) reference table must contain an accurate commodity code before it can be established as a stock item in the Inventory Control system. The Office of Administration maintains the COMT table.

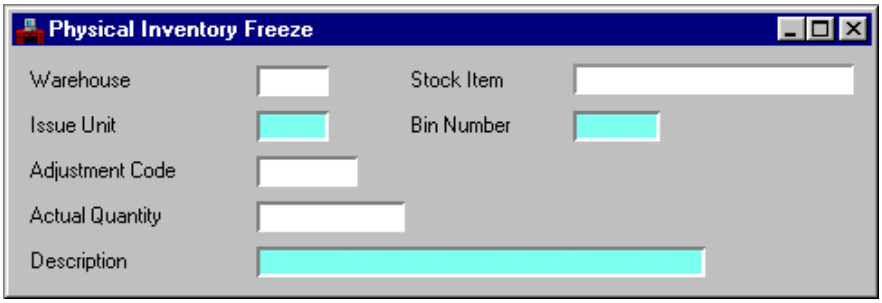
This table defines valid commodity codes that can be used to establish stock items in inventory. Changes or additions to the COMT table must be requested through the Office of Administration (OA).

Inventory by Keyword (INKY)



Inventory by Keyword (INKY) defines various keywords for a given stock item. The keywords can be used to locate stock item codes when the stock item code or exact description is not available. For example, a stock item officially known as “chlorine bleach” may be found on INKY by searching for “bleach”, “bleach, chlorine”, or even “Clorox”, if these values have been defined on this table. This table is maintained by the inventory agency.

Physical Inventory Freeze (INVF)



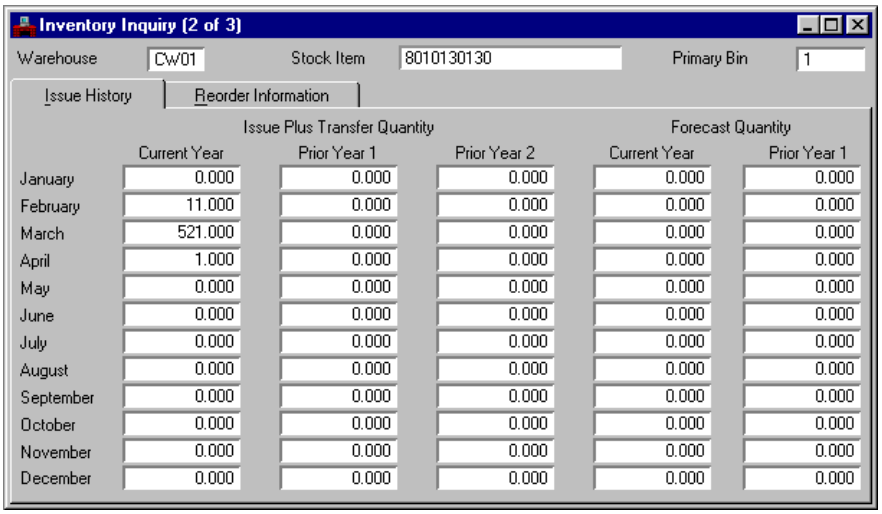
Physical Inventory Freeze (INVF) stores information for physical inventory to reconcile the actual counts with the on-hand (system) quantities. When a warehouse/stock item is added to this table, its corresponding Inventory Inquiry (INVN) record is "frozen", preventing it from being issued (although stock requisitions are still allowed). This table is maintained by the inventory agency.

The Inventory Freeze program will automatically add records to this table based on the parameters used when running the program (bin numbers, warehouse, etc.).

Once an item has been physically counted, this table should be manually updated with the actual count.

The Inventory Reconciliation program will read the actual counts stored on this table and update the on-hand quantities on Inventory Inquiry (INVN).

Inventory Inquiry (2 of 3) (INV2)

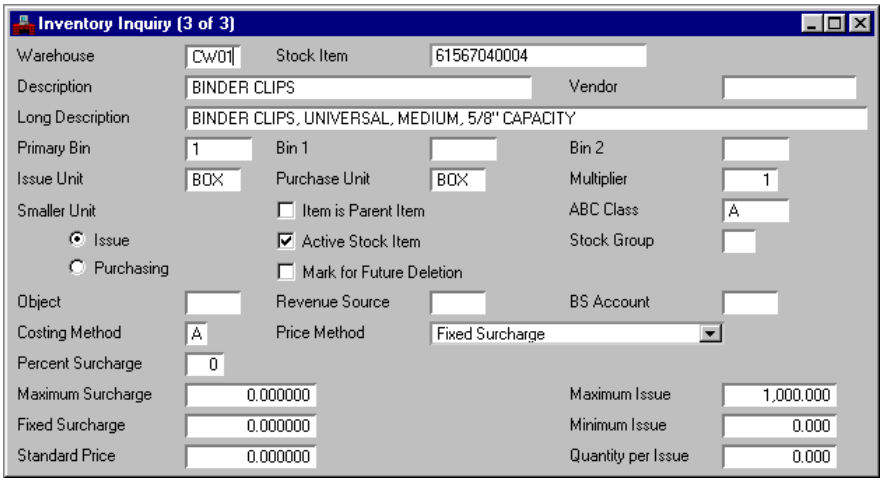


Inventory Inquiry (2 of 3) (INV2) is an inquiry window that displays system and user maintained information. The INV2 window has two panels, *Issue History* and *Reorder Information*. The *Issue History* view contains inventory issue history and forecasting information. The *Reorder Information* view is used to enter and view reorder information for a stock item, such as lead times and reorder quantities. Depending on a stock item's ABC classification, these fields may be system or user maintained. Information is added or changed when the following batch programs are ran:

- Forecast Usage
- Lead Time Calculation
- Reorder Level and Reorder Quantity Calculation

History data is updated whenever an item is issued from stock. This table is maintained by the inventory agency.

Inventory Inquiry (3 of 3) (INV3)

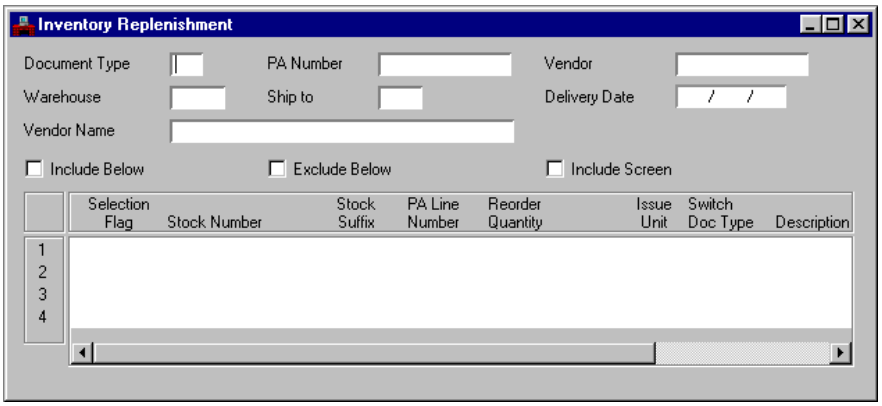


Inventory Inquiry (3 of 3) (INV3) is used to enter all new stock items into the inventory system. This table is maintained by the inventory agency. Information entered includes:

- The warehouse and stock item codes
- The pricing method
- The purchasing and issuing units
- The ABC Classification Parameter
- The location in the warehouse where the item is stored

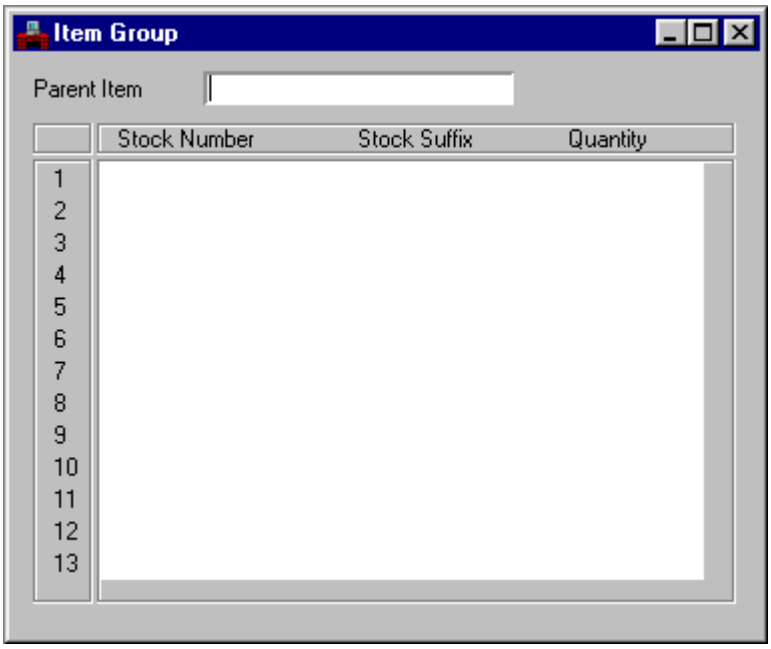
Data entered on INV3 is automatically loaded into the other two inventory inquiry tables, Inventory Inquiry (1 of 3) (INVN) and Inventory Inquiry (2 of 3) (INV2).

Inventory Replenishment (IREP)



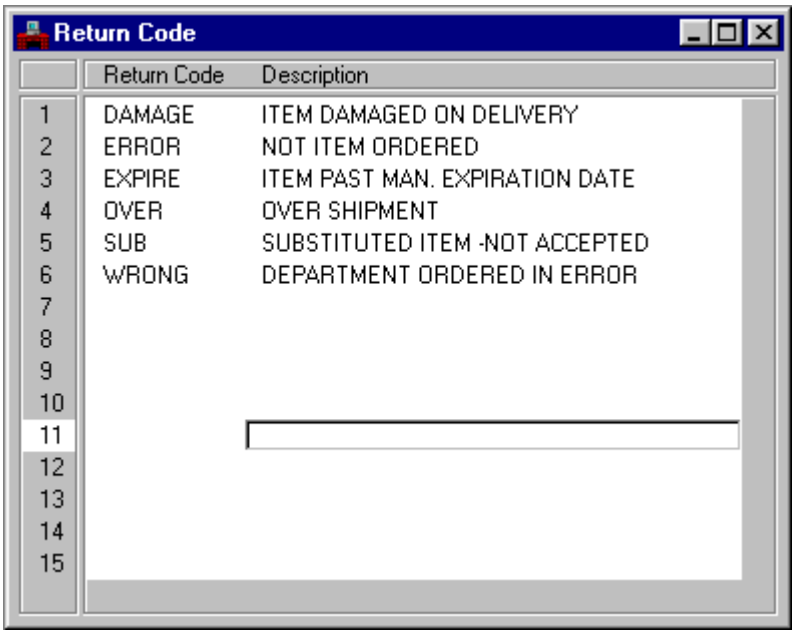
Inventory Replenishment (IREP) is used to select records for the Inventory Replenishment program. This program adds Requisition and Price Agreement documents to the system. Records are added to this table by the Replenishment Review Report program. Records are changed and deleted by the user. Purchasing documents will be created from these entries during the nightly cycle. This table is maintained by the inventory agency.

Item Group (ITMG)



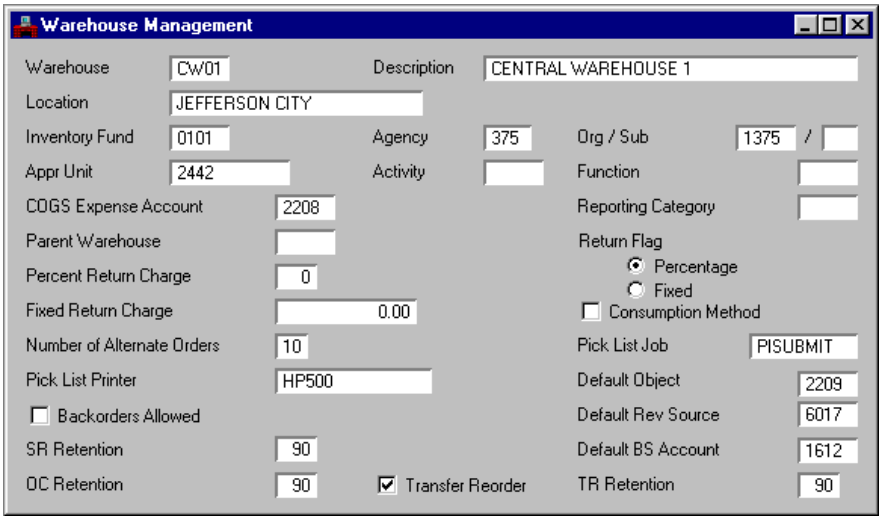
Item Group (ITMG) is used to define the relationship between parent items and child items. A parent item is not a commodity in and of itself; it is a combination of child items. A child item is a commodity that is issued as part of a group. An example of a parent item might be a tool kit. Examples of child items would be the hammers and nails that make up the tool kit. Items are purchased into inventory at the child level. Items are issued from inventory at the parent level. A parent item cannot be issued unless all components are available. This table is maintained by the inventory agency.

Return Code (RETC)



Return Code (RETC) is used to define valid codes for returning stock items to inventory after they have been issued. These codes are entered on the Stock Return document (SN). The Office of Administration maintains RETC.

Warehouse Management (WHS2)

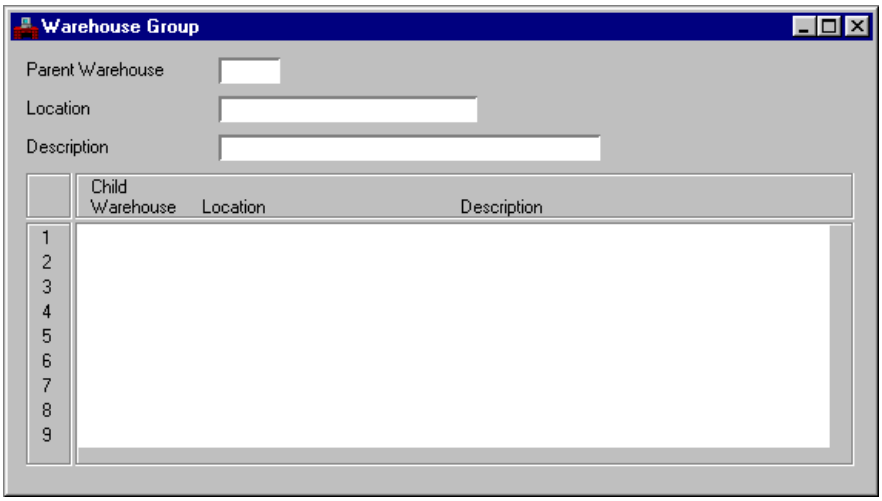


Warehouse Management (WHS2) is used to establish warehouses in SAM II. WHS2 must be set up for a warehouse before any inventory transactions can be processed against it. Information entered includes:

- The warehouse code and location
- Default accounting codes used to record inventory balances, revenues, and expenditures for the warehouse
- The length of time which closed transaction data will be retained on appropriate system maintained tables

The Office of Administration maintains WHS2.

Warehouse Group (WHSG)



Warehouse Group (WHSG) specifies the relationship between a central warehouse and its satellite warehouses. Similar to the parent/child relationship between stock items, a parent/child relationship may also be defined for warehouses. This table is maintained by the inventory agency.

Exercise #1: Entering a New ABC Classification

Scenario:

You are the inventory manager for warehouse CW01.

You need to create a new classification parameter for important items that you must have in stock.

You want a high level of service for this inventory classification. As a result, you have chosen to use 3.75 as the Safety Stock Factor to ensure a 99.87 % level of service.

Complete the following exercise:

Step 1. From the ***Inventory*** Business Area, open the **Stock Item** Business Function. The Commodity table (COMT) will open automatically.

Step 2. Click on the **ABCP** button at the bottom of the Business Function window.

Step 3. Select **Window: Clear Window** to clear the screen.

Step 4. Enter the following information:

Agency: ***375***
ABC Classification: ***Enter your User ID (OA###)***
Description: ***High Service Level***
Safety Stock Factor: ***375***
Number of Months: ***12***

Note: There are 2 implied decimal places in the Safety Stock Factor.

Step 5. Using the *Forecast Method* radio button, select ***Nonseasonal / Regular.***

Step 6. Using the *Order Quantity Method* radio button, select ***Manual***.

Step 7. Select **Modify: Add** to add and save the entered information.

Step 8. Click on the **Close** button to close the Business Function.

Exercise #2: Requesting a New Adjustment Code

Scenario:

You need to request a new Adjustment Code to account for broken stock items. The object code for the new adjustment is 2209. Complete the ADJC table and route it to OA/DPMM.

Complete the following exercise:

Step 1. From the ***Inventory*** Business Area, open the **Inventory Adjustment** Business Function. The Adjustment Code table (ADJC) will open automatically.

Step 2. Enter the following information:

Code: ***Enter your User ID (OA###)***
Description: ***Broken Stock Item***
Object: ***2209***

In production, once you have completed the entry, you will use Workflow e-email to send an attachment of this table to OA/DPMM for approval and update by selecting **File: Send Message**. Refer to the Workflow appendix at the end of the System Introduction class for details.

Step 3. Click on the **Close** button at the bottom of the window to close the Business Function.

Documents

Topic Objectives

After completing this topic, you will be able to:

- Process various SAM II inventory documents including requisitions, issues, transfers, returns, and adjustments

Topic Overview

This topic introduces you to the following documents:

- Stock Requisition (SR)
- Pick and Issue (PI)
- Stock Issue Confirmation (CI)
- Over the Counter (OC)
- Stock Return (SN)
- Stock Transfer Issue (TI)
- Stock Transfer Receipt (TR)
- Inventory Adjustment (IA)
- Manufactured Over the Counter (MC)
- Manufactured Items Receipt (MN)

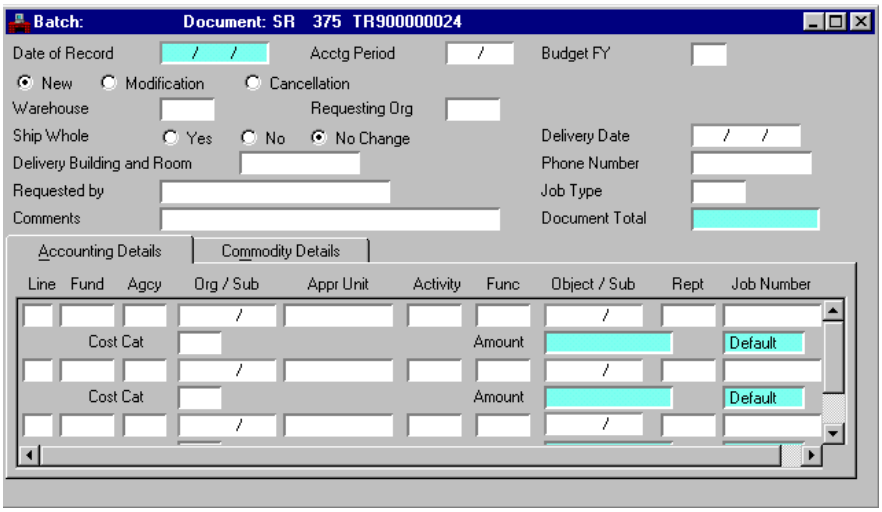
Stock Requisition (SR)

A Stock Requisition document (SR) reserves quantities of stock items from an on-hand warehouse supply for later delivery. This reduces the available quantity. If items are not immediately available, they may be backordered and filled later by having the Backorder Servicing program run.

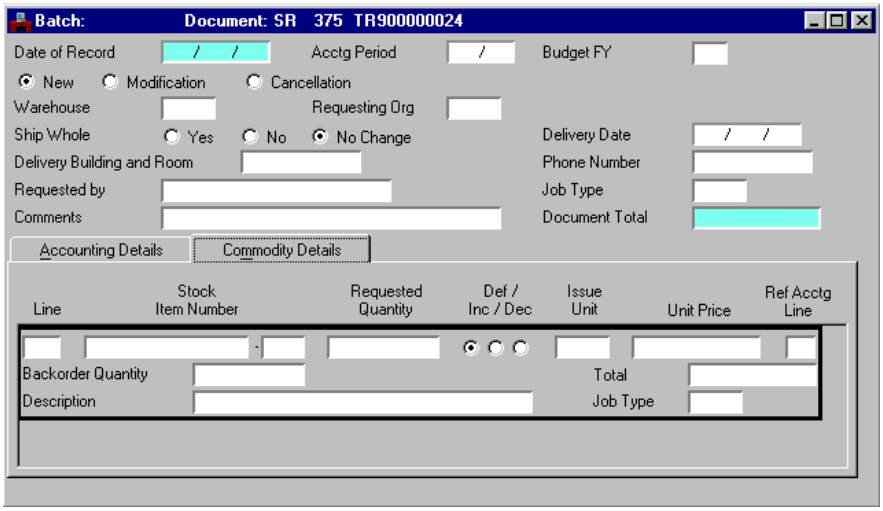
Stock Requisitions (SR) have the following capabilities:

- Recorded in SAM II as pre-encumbrances and shown as a category separate from encumbrances and expenditures on reports
- Used to request items from a warehouse
- Header information such as requesting individual, telephone number, and delivery date may be entered
- Stock item data such as stock number and quantity may be provided for several of separate stock items
- An individual SR may be split among several accounting lines

Accounting Details



Commodity Details

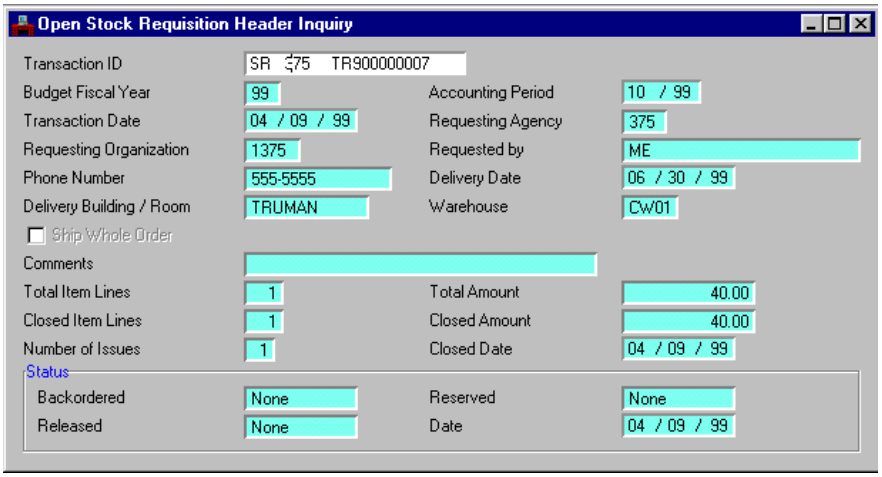


Updated Inquiry Tables

The following commonly used inquiry tables are updated when an SR document is accepted into the system:

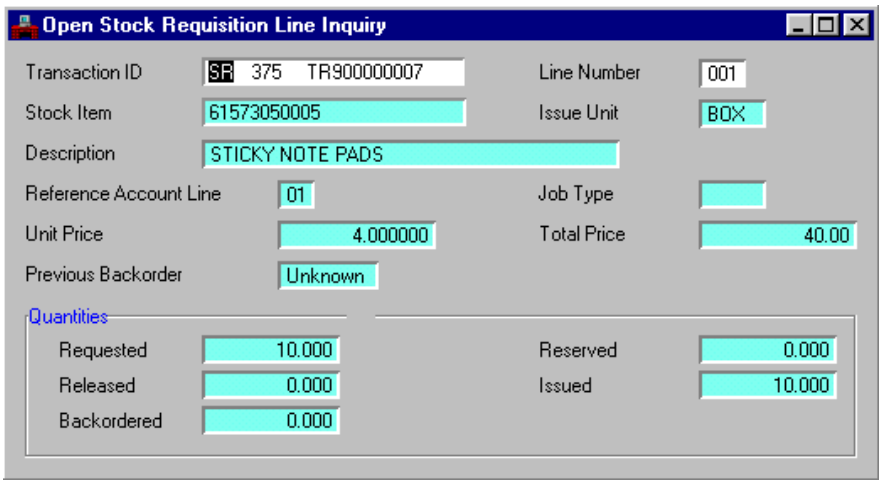
- Open Stock Requisition Header Inquiry (OSRH)
- Open Stock Requisition Line Inquiry (OSRC)
- Open Stock Requisition Account Line Inquiry (OSRL)
- Inventory Inquiry (1 of 3) (INVN)

Open Stock Requisition Header Inquiry (OSRH)



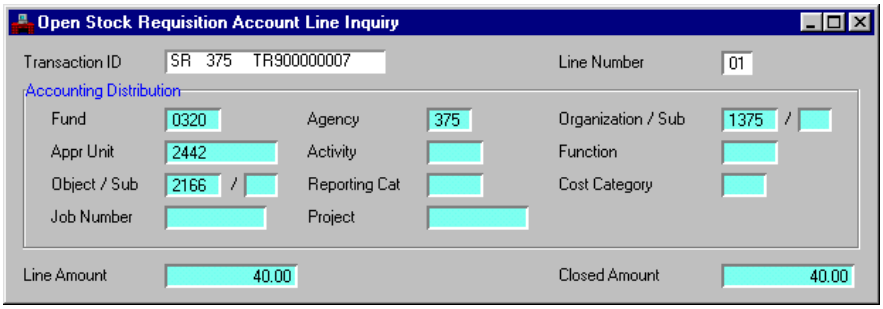
Processing an SR will create a new entry on OSRH to record and display header information for the SR.

Open Stock Requisition Line Inquiry (OSRC)



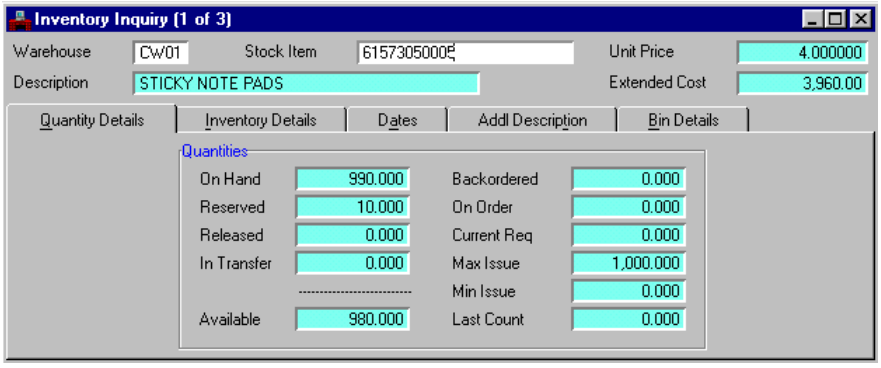
Processing an SR will create a new entry on OSRC for each item line on the document. The OSRC entries record and display item line information for the SR.

Open Stock Requisition Account Line Inquiry (OSRL)



Processing an SR will create a new entry on OSRL for each accounting line on the document. The OSRL entries record and display accounting line information for the SR.

Inventory Inquiry (1 of 3) (INVN)



Processing an SR will cause adjustments in the *Reserved* and *Available* fields to reflect the amount of the SR.

Viewing Information on INVN

Step 1. From the ***Inventory*** Business Area, open the **Combinations** Business Function

Step 2. Click on the **INVN** button to open the Inventory (1 of 3) (INVN) window.

Step 3. Enter the following in the appropriate fields:

Warehouse: ***CW01***
Stock Item: ***61573050005***

Step 4. Select **Display: Browse Data** to display the information for the stock item provided. Note the *Reserved* and *Available* quantity fields.

Step 5. Click on the **Close** button to close the Business Function.

Exercise #3: Stock Requisition

Scenario:

Your organization needs to procure some Sticky Note Pads. Since these items are in stock, a Stock Requisition needs to be processed first in order to receive them.

Complete the following exercise:

The first few steps to create an SR are identical to those you follow to create any document:

Step 1. From the ***Inventory*** Business Area, open the **Stock Requisition** Business Function.

Step 2. Click on the **SR** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Stock Requisition*** automatically selected in the *Document Type* field.

Step 3. Enter ***375*** (the agency) in the first section of the *Document ID* and the prefix ***TR*** in the second section.

Step 4. Select ***Automatic Document Numbering***. This feature allows the system to automatically number your documents sequentially.

Step 5. Select **OK**. The SR appears. The document ID is displayed in the title bar of the window. Write the complete Document ID here:

_____.

Note: You can move between views by selecting the tab buttons along the center of the window.

Step 6. Enter the following information:

Warehouse: ***CW01***
Requesting Org: ***1375***
Delivery Date: ***Enter today's date***
Delivery Building and Room: ***Truman 510***
Phone Number: ***Enter your office phone number***
Requested By: ***Enter your name***

Step 7. Enter the following information in the *Accounting Details* view:

Line: ***01***
Fund: ***0566***
Agcy: ***375***
Org: ***1375***
Appr Unit: ***2442***
Func: ***1025***
Object: ***2166***

Step 8. Click on the **Commodity Details** tab. The *Commodity Details* view appears.

Step 9. Enter the following information:

Line: ***001***
Stock Item Number: ***61573050005***
Requested Quantity: ***10***

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Close the Business Function by clicking on the **Close** button at the bottom of the Business Function window.

Depending on the procedures that are established, Workflow will route the document to the appropriate user's worklist for approval. For training purposes, your document will route directly to your own worklist.

Step 3. Open your Worklist by clicking on it in the left-hand panel of the Navigator window.

Step 4. Click the right mouse button in the right-hand panel of the Navigator window. Select **Refresh Worklist** in the menu that appears.

Step 5. Find your document and open it by double-clicking on the line of the document.

Step 6. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 7. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted status.

Step 8. Select **Yes** in the dialogue box that appears to close the document.

View Updated Tables

Now let's look at the tables that were updated by processing the SR.

OSRH/OSRC/OSRL – Browse for your stock requisition using the steps below.

Step 1. From the ***Inventory*** Business Area, open the **Open Item Tables** Business Function. The Open Stock Requisition Header Inquiry table (OSRH) will open automatically.

Step 2. Enter the document ID you wrote down from your SR in the *Transaction ID* field.

Step 3. Select **Display: Browse Data** to display header information from your SR.

Step 4. Click on the **OSRC** button at the bottom of the window to open OSRC and view commodity line information from your SR.

Step 5. Click the **OSRL** button at the bottom of the window to open OSRL and view accounting line information from your SR.

Step 6. Click on the **Close** button at the bottom of the window to close the Business Function.

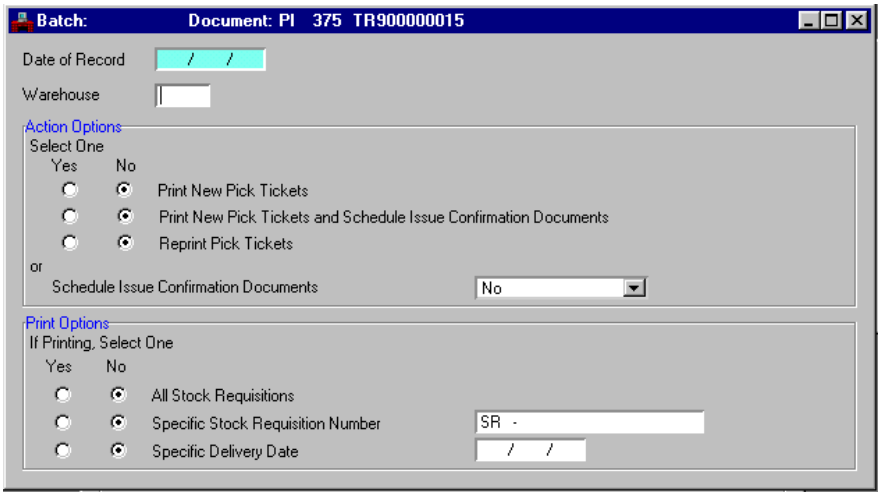
Pick and Issue (PI)

A Pick and Issue document (PI) schedules items previously reserved (through a Stock Requisition) to be picked up for delivery and releases them from a reserved status. This function is performed by creating a Pick Ticket Report (IN80). From this report, the warehouse can determine the stock item, the quantity, and the bin number of the items that are to be picked up. It also creates the corresponding Issue Confirmation document (CI). The PI document is only used in conjunction with the Stock Requisition. The PI document has no accounting effects.

The PI document can perform the following functions, explained below:

- Print new Pick Tickets
- Print new Pick Tickets and schedule Issue Confirmation documents (CI)
- Reprint Pick Tickets
- Schedule Issue Confirmation documents (CI)

Pick and Issue Document (PI)



Print New Pick Tickets

The PI submits an off-line program that prints pick tickets for selected Stock Requisitions for a specific warehouse. The pick ticket shows which items are to be picked off inventory shelves and prepared for issuance. Reserved quantities are released and an Issue Confirmation document (CI) is generated for each pick ticket. The status of each resulting CI is set to ***Held***. Each printed pick ticket includes both the corresponding SR and CI transaction ID's.

Print New Pick Tickets and Schedule Issue Confirmation Documents

This option performs the same actions as ***Print New Pick Tickets***, except the status of the CI is set to Scheduled (***SCHED***) and the transactions are processed during the next nightly cycle. Use this option when picked quantities will be confirmed on the same day that they are picked (i.e., the CI document will be processed that evening).

Reprint Pick Tickets

This option reprints confirmed picks only. CI documents and open stock requisition item issue lines will not be created or updated. Likewise, the status of the CI's will not change.

Schedule Issue Confirmation Documents

All CI's that were picked on a specified date will be scheduled to be processed. If ***By Delivery Date*** is selected, all CI transactions with a *Delivery Date* equal to the PI transaction's pick date will be scheduled for processing.

Printing Options

The following three options are available if printing:

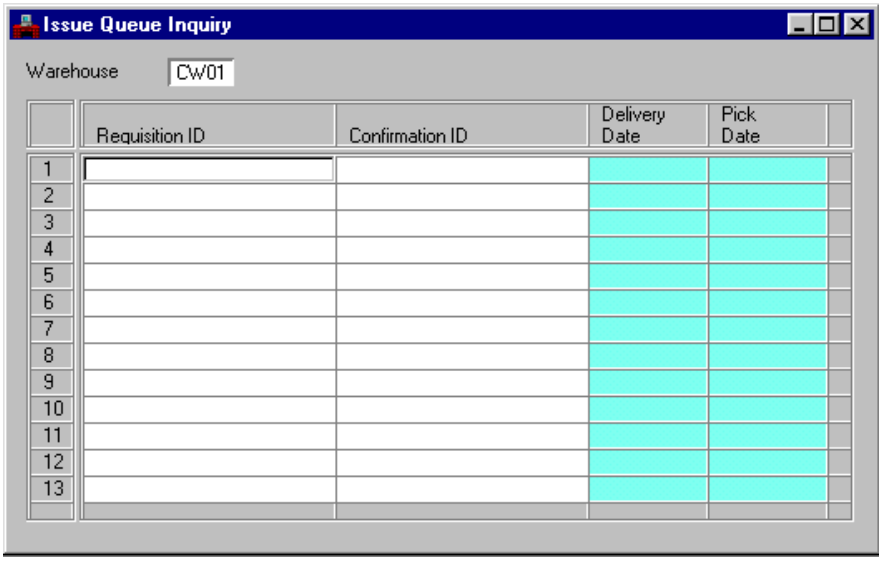
- Pick Tickets for all Stock Requisitions that meet the specified criteria
- A single Pick Ticket for a selected Stock Requisition
- Pick Tickets for all Stock Requisitions with a specific delivery date (this option will print pick tickets for all outstanding SR's with a delivery date prior to the date entered)

Updated Inquiry Tables

The following commonly used inquiry tables are updated when a PI document is accepted into the system:

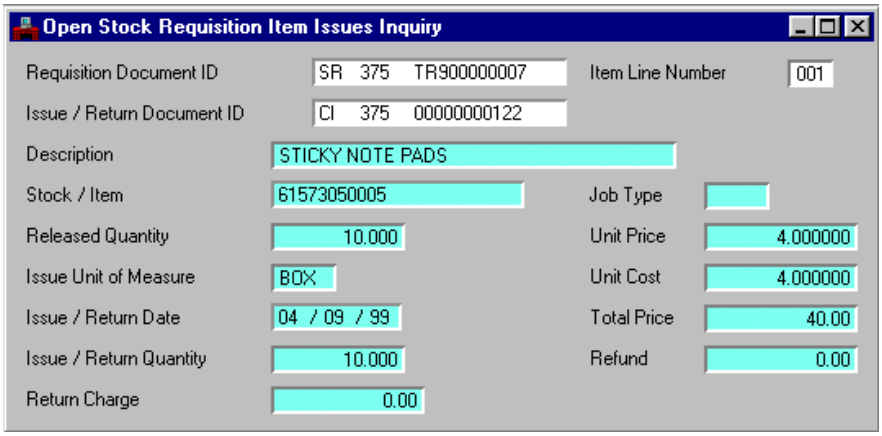
- Issue Queue Inquiry (ISSQ)
- Open Stock Requisition Item Issues Inquiry (OSRI)
- Open Stock Requisition Header Inquiry (OSRH)
- Open Stock Requisition Line Inquiry (OSRC)
- Inventory Inquiry (1 of 3) (INVN)

Issue Queue Inquiry (ISSQ)



ISSQ is used to find which Issue Confirmation documents (CI) are associated with a given Stock Requisition (SR). As PI's are accepted, the *Confirmation ID* and *Pick Date* fields of the corresponding records on ISSQ are updated.

Open Stock Requisition Item Issues Inquiry (OSRI)



Processing a PI will increase the *Released Quantity* field on OSRI by the number of items picked.

OSRH – In addition to the above, processing a PI will update the *Released* and *Reserved* status fields on OSRH.

OSRC – Processing a PI will increase the *Released* quantity field and decrease the *Reserved* quantity field by the number of items picked.

INVN – Processing a PI will increase the *Released* quantity field and decrease the *Reserved* quantity field by the number of items picked.

Exercise #4: Pick & Issue

Scenario:

An organization has placed a request for 10 boxes of Sticky Notes by processing a Stock Requisition (SR). The SR is received by the warehouse and the warehouse manager must pick these items from inventory.

The first few steps to create a PI are identical to those you follow to create any document:

Step 1. From the ***Inventory*** Business Area, open the **Stock Requisition** Business Function.

Step 2. Click on the **PI** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Pick and Issue*** automatically selected in the *Document Type* field.

Step 3. Enter ***375*** (the agency) in the first section of the *Document ID* and the prefix ***TR*** in the second section.

Step 4. Select ***Automatic Document Numbering***. This feature allows the system to automatically number your documents sequentially.

Step 5. Select **OK**. The PI appears. The document ID is displayed in the title bar of the window. Write the complete Document ID here:

_____.

Step 6. Enter ***CW01*** in the *Warehouse* field.

Step 7. Select the ***Yes*** radio button for *Print New Pick Tickets and Schedule Issue Confirmation Documents*.

Step 8. Select the ***Yes*** radio button for *Printing a Specific Stock Requisition Number* and enter your Stock Requisition number from Exercise 3.

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Close the Business Function by clicking on the **Close** button at the bottom of the Business Function window.

Depending on the procedures that are established, Workflow will route the document to the appropriate user's worklist for approval. For training purposes, your document will route directly to your own worklist.

Step 3. Open your Worklist by clicking on it in the left-hand panel of the Navigator window.

Step 4. Click the right mouse button in the right-hand panel of the Navigator window. Select **Refresh Worklist** in the menu that appears.

Step 5. Find your document and open it by double-clicking on the line of the document.

Step 6. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 7. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted status.

Step 8. Select **Yes** in the dialogue box that appears to close the document.

View Updated Tables

Now let's look at the tables that were updated by processing the PI.

OSRH/OSRC/OSRI – Browse for your stock requisition using the steps below:

Step 1. From the ***Inventory*** Business Area, open the **Open Item Tables** Business Function. The Open Stock Requisition Header Inquiry table (OSRH) will open automatically.

Step 2. Enter the document ID you wrote down from your SR in the *Transaction ID* field.

Step 3. Select **Display: Browse Data** to display header information from your SR.

Step 4. Click on the **OSRC** button at the bottom of the window to open OSRC and view commodity line information from your SR.

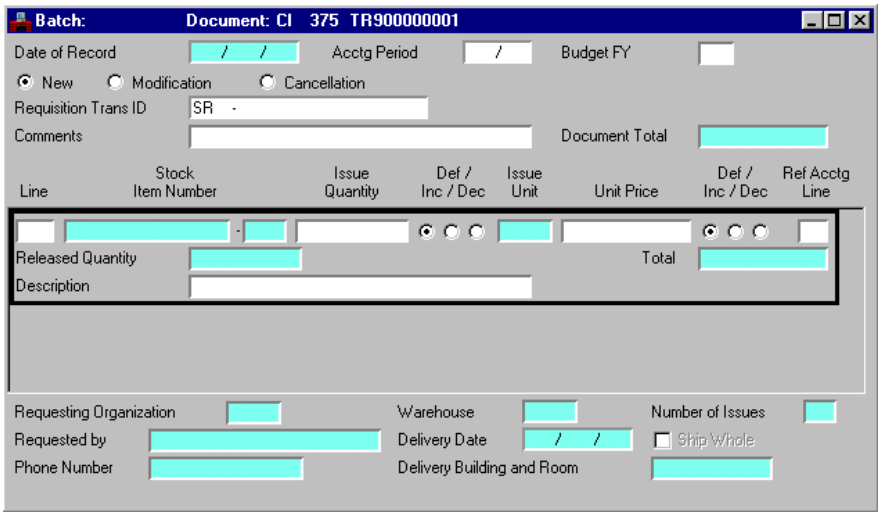
Step 5. Click the **OSRI** button at the bottom of the window to open OSRI and view issue and return information from your SR.

Step 6. Click on the **Close** button at the bottom of the window to close the Business Function.

Stock Issue Confirmation (CI)

The Stock Issue Confirmation document (CI) confirms that previously reserved and released items have been issued from the warehouse to the buyer. The on-hand quantity of the item in the warehouse is reduced by the amount issued. The CI is used in conjunction with the Stock Requisition (SR) and the Pick and Issue (PI) documents. The CI document reverses the pre-encumbrance produced by the SR, charges the user department for the item issued, and reduces the inventory quantity. The PI automatically generates this document.

Stock Issue Confirmation Document (CI)

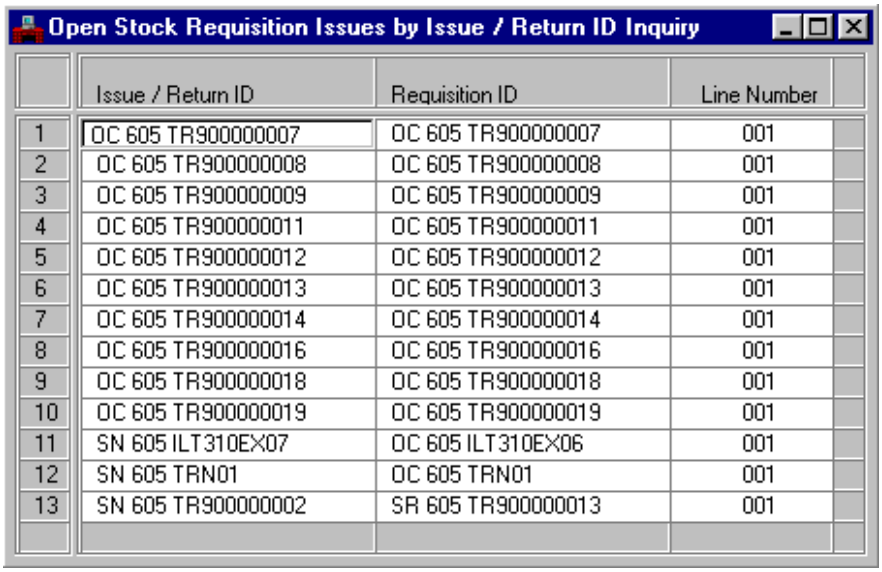


Updated Inquiry Tables

The following commonly used inquiry tables are updated when a CI document is accepted into the system:

- Open Stock Requisition Issues by Issue / Return ID Inquiry (OSRR)
- Open Stock Requisition Item Issues Inquiry (OSRI)
- Issue Queue Inquiry (ISSQ)
- Open Stock Requisition Header Inquiry (OSRH)
- Open Stock Requisition Line Inquiry (OSRC)
- Open Stock Requisition Account Line Inquiry (OSRL)
- Inventory Inquiry (1 of 3) (INVN)
- Inventory Inquiry (2 of 3) (INV2)

Open Stock Requisition Issues by Issue / Return ID Inquiry (OSRR)



	Issue / Return ID	Requisition ID	Line Number
1	OC 605 TR900000007	OC 605 TR900000007	001
2	OC 605 TR900000008	OC 605 TR900000008	001
3	OC 605 TR900000009	OC 605 TR900000009	001
4	OC 605 TR900000011	OC 605 TR900000011	001
5	OC 605 TR900000012	OC 605 TR900000012	001
6	OC 605 TR900000013	OC 605 TR900000013	001
7	OC 605 TR900000014	OC 605 TR900000014	001
8	OC 605 TR900000016	OC 605 TR900000016	001
9	OC 605 TR900000018	OC 605 TR900000018	001
10	OC 605 TR900000019	OC 605 TR900000019	001
11	SN 605 ILT310EX07	OC 605 ILT310EX06	001
12	SN 605 TRN01	OC 605 TRN01	001
13	SN 605 TR900000002	SR 605 TR900000013	001

When a CI is accepted into the system a record is created on OSRR, listing the corresponding Stock Requisition document ID.

OSRI – In addition to the above, processing a CI will update the *Issue Date* and *Issue Quantity* fields on the Open Stock Requisition Item Issue Inquiry (OSRI) table.

ISSQ – When a CI is accepted by the system, the corresponding Stock Requisition record is deleted from ISSQ.

OSRH – When a CI is accepted against an SR, the *Number of Issues* field is incremented by one and the *Date* status field is set equal to the CI *Date of Record*. As item lines on the SR are closed, the *Closed Amount* and *Closed Item Lines* fields are updated. When the CI that closes the last item line is accepted, the *Closed Date* is set to the CI *Date of Record* and the entire requisition is considered closed.

OSRC – When a CI is accepted, the OSRC *Released* quantity is decreased and the *Issued* quantity is increased by the issued amount from the CI.

OSRL – When a CI is accepted, the *Closed Amount* on OSRL is set equal to the sum of all of the item lines that reference a particular accounting line.

INVN/INV2 – Processing a CI will decrease the *On Hand* and *Released* fields on INVN and increase the proper month's *Issue Quantity* field on INV2.

Exercise #5: Stock Issue Confirmation

Scenario:

10 boxes of Sticky Notes have been picked for the requester and are ready to be issued. The warehouse manager must process a Stock Issue Confirmation (CI) to record the issuance.

First, you must find the system generated Stock Issue Confirmation (CI) which corresponds to your Stock Requisition (SR).

Step 1. From the ***Inventory*** Business Area, open the **Stock Requisition** Business Function. The ISSQ table is displayed. This table will list stock requisitions and their referencing Issue Confirmation documents.

Step 2. Enter ***CW01*** in the *Warehouse* field.

Step 3. Enter the Stock Requisition ID you used in Exercise 3 in the *Requisition ID* field. Use spaces between each section of the document ID.

Step 4. Select **Display: Browse Data**. The CI document ID corresponding to your SR will be displayed. Write the complete document ID of the CI here:

_____.

Note: The CI document ID is also on the printed PI document.

Step 5. Click on the ***CI*** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Stock Issue Confirmation*** automatically selected in the *Document Type* field.

Step 6. Enter the CI document number you wrote down in the *Document ID* field.

Step 7. Select the **Open** radio button. Do **NOT** click ***Automatic Document Numbering***.

Step 8. Click the **OK** button. Your CI document will appear.

At this point, you would review the CI for errors and make any necessary changes (i.e., *Issue Quantity*).

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 3. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted (***ACCPT***) status.

Step 4. Select **Yes** in the dialogue box that appears to close the document.

Step 5. Click on the **Close** button at the bottom of the window to close the Business Function.

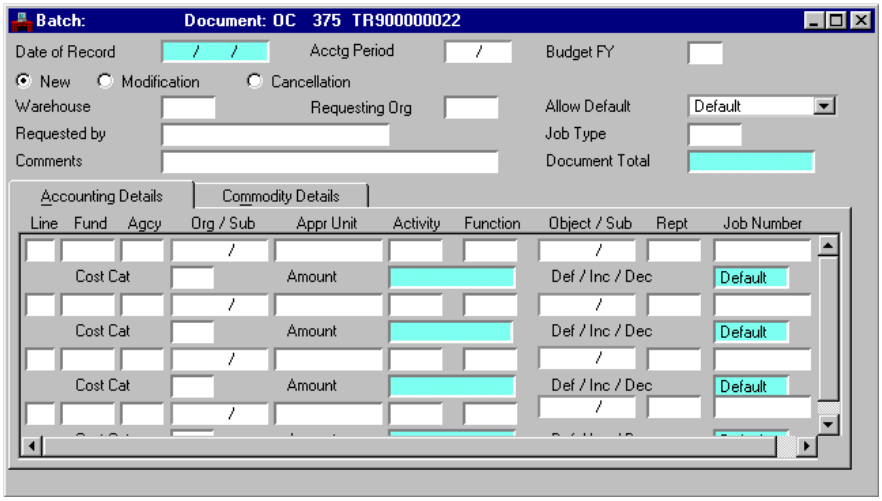
View Updated Tables

OSRH/OSRC/OSRL/OSRI/OSRR – Use the steps learned earlier to view information about your SR and CI on the open item tables.

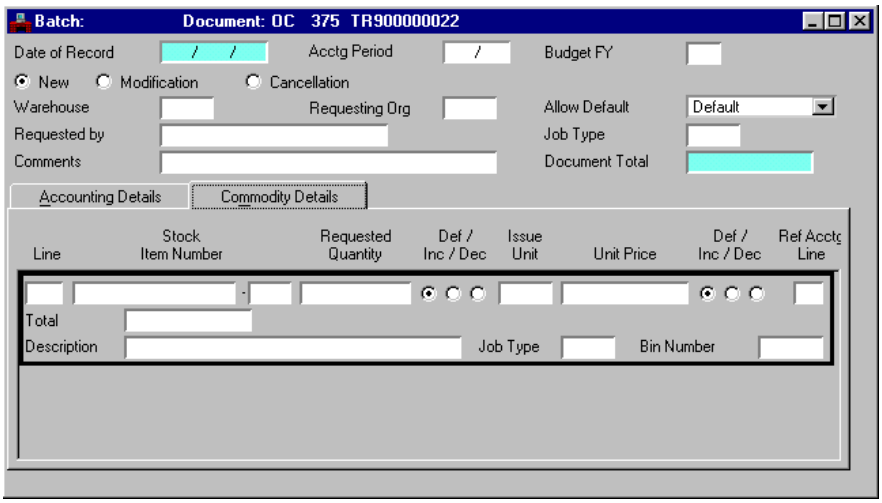
Over the Counter (OC)

The Over the Counter document (OC) allows you to issue items directly to the requester, immediately moving them from an ***On-Hand*** status to an ***Issued*** status. Since this bypasses the Pick and Issue (PI) and Issue Confirmation (CI) steps, it is assumed that when using the OC the requester is placing the order and picking up the goods at the same time. Unlike the SR, backordering is not permitted when using an OC. If there is insufficient quantity on-hand to fill the request and an OC is entered, an error message will be received and the OC will not process.

Accounting Details



Commodity Details



Updated Inquiry Tables

The following commonly used inquiry tables are updated when an OC document is accepted into the system:

- Open Stock Requisition Header Inquiry (OSRH)
- Open Stock Requisition Line Inquiry (OSRC)
- Open Stock Requisition Account Line Inquiry (OSRL)
- Open Stock Requisition Issues by Issue / Return ID Inquiry (OSRR)
- Open Stock Requisition Item Issues Inquiry (OSRI)
- Inventory Inquiry (1 of 3) (INVN)
- Inventory Inquiry (2 of 3) (INV2)

OSRH – As each OC is accepted into the system, an entry is made on OSRH, displaying header information from the OC.

OSRC – As each OC is accepted into the system, an entry is made on OSRC for each item line on the document, displaying stock item information.

OSRL – As each OC is accepted into the system, an entry is made on OSRL for each accounting line on the document, displaying accounting information.

OSRR – As each OC is accepted into the system a record is created on OSRR.

OSRI – As each OC is accepted into the system, an entry is made on OSRI for each item line on the document, displaying issue and return information.

INVN – Processing an OC will decrease the *On Hand* and *Available* fields on INVN by the amount issued.

INV2 – Processing an OC will increase the proper month's *Issue Quantity* field on INV2 by the amount issued.

Exercise #6: Over the Counter

Scenario:

A user has come directly to your warehouse and asked for some boxes of pens. Since the issue can be done immediately, you will process an OC document to record the issuance.

Complete the following exercise:

The first few steps to create an OC are identical to those you follow to create any document:

Step 1. From the ***Inventory*** Business Area, open the **Over-the-Counter** Business Function. The Batch/Document Entry window appears with the ***Over the Counter*** automatically selected in the *Document Type* field.

Step 2. Enter ***375*** (the agency) in the first section of the *Document ID* and the prefix ***TR*** in the second section.

Step 3. Select ***Automatic Document Numbering***. This feature allows the system to automatically number your documents sequentially.

Step 4. Select **OK**. The OC appears. The document ID is displayed in the title bar of the window. Write the complete Document ID here:

_____.

Note: You can move between views by selecting the tab buttons along the center of the window.

Step 5. Enter the following information:

*Warehouse**: CW01***
*Requesting Org: **1375***
*Requested by: **Enter your name***

Step 6. Enter the following information in the **Accounting Details** view of your OC:

Line: ***01***
Fund: ***0566***
Agcy: ***375***
Org: ***1375***
Appr Unit: ***2442***
Function: ***1025***
Object: ***2166***

Step 7. Click on the **Commodity Details** tab. The *Commodity Details* view appears.

Step 8. Enter the following information:

Line: ***001***
Stock Item Number: ***62086010001***
Requested Quantity: ***10***

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 3. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted (***ACCPT***) status.

Step 4. Select **Yes** in the dialogue box that appears to close the document.

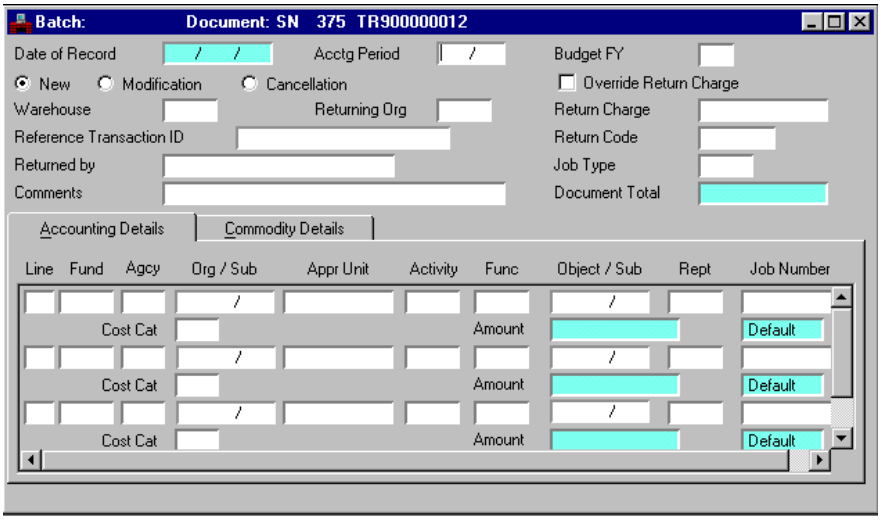
View Updated Tables

OSRH/OSRC/OSRL/OSRI/OSRR – Use the steps learned earlier to view information about your OC on the open item tables.

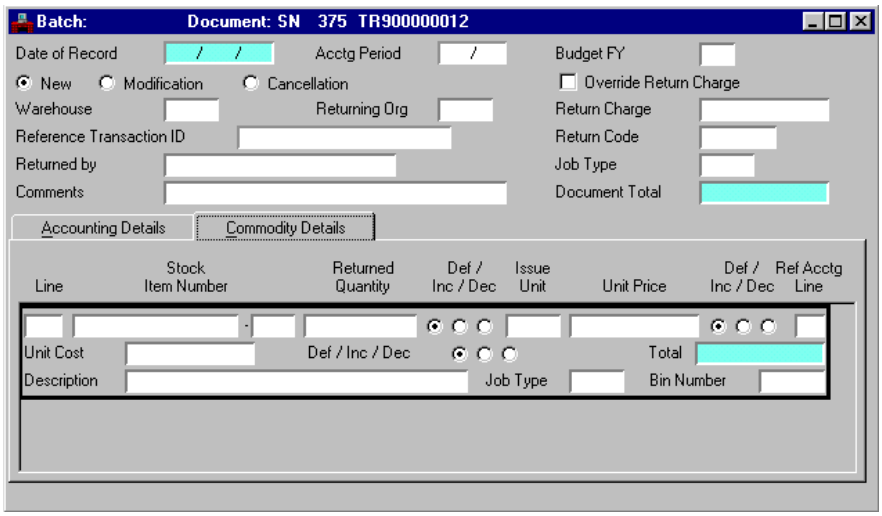
Stock Return (SN)

The Stock Return document (SN) allows the user to return previously issued items to the inventory of the issuing warehouse, regardless of how the items were originally issued (SR, PI and CI, or OC). The SN can be used to charge a restocking fee for returning the items. In addition, the SN will automatically reverse the accounting entries that were made upon issue. All returns are classified by a predefined return code (from RETC).

Accounting Details



Commodity Details



Updated Inquiry Tables

The following commonly used inquiry tables are updated when an SN document is accepted into the system:

- Open Stock Requisition Line Inquiry (OSRC)
- Open Stock Requisition Item Issues Inquiry (OSRI)
- Open Stock Requisition Issues by Issue / Return ID Inquiry (OSRR)
- Inventory Inquiry (1 of 3) (INVN)
- Inventory Inquiry (2 of 3) (INV2)

OSRC – When an SN is accepted into the system, the *Issued* quantity on OSRC is decreased by the amount returned on the SN item line. OSRH and OSRL are also updated accordingly.

OSRI – When an SN is accepted into the system, a complete OSRI record is created, detailing the return.

OSRR – When an SN is accepted into the system, a record is created on OSRR, listing the corresponding Over the Counter or Stock Requisition document ID.

INVN – Processing an SN will increase the *On Hand* field on INVN.

INV2 – Processing an SN will decrease the proper month's *Issue Quantity* field on INV2.

Exercise #7: Stock Return

Scenario:

The requester of the Sticky Note Pads realized they only needed 5 boxes, instead of the 10 they originally received. The requester returned 5 to the warehouse, and the manager must record the return using a Stock Return document (SN).

Complete the following exercise:

The first few steps to create an SN are identical to those you follow to create any document:

Step 1. From the ***Inventory*** Business Area, open the **Stock Return** Business Function.

Step 2. Click on the **SN** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Stock Return*** automatically selected in the *Document Type* field.

Step 3. Enter ***375*** (the agency) in the first section of the *Document ID* and the prefix ***TR*** in the second section.

Step 4. Select ***Automatic Document Numbering***. This feature allows the system to automatically number your documents sequentially.

Step 5. Select **OK**. The SN appears. The document ID is displayed in the title bar of the window. Write the complete Document ID here:

_____.

Note: You can move between views by selecting the tab buttons along the center of the window.

Step 6. Enter the following information in the header portion of your document:

*Warehouse**: CW01***
*Returning Org: **1375***
*Reference Transaction ID: **Your SR Number from Exercise 3***
*Return Code**: WRONG***
*Returned by: **Enter your name***

Step 7. Click on the **Commodity Details** tab. The *Commodity Details* view appears.

Step 8. Enter the following information:

*Line: **001***
*Returned Quantity: **5***

Note: All accounting information and the remaining commodity information will be inferred from the referenced SR.

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 3. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted (***ACCPT***) status.

Step 4. Select **Yes** in the dialogue box that appears to close the document.

Step 5. Click on the **Close** button at the bottom of the window to close the Business Function.

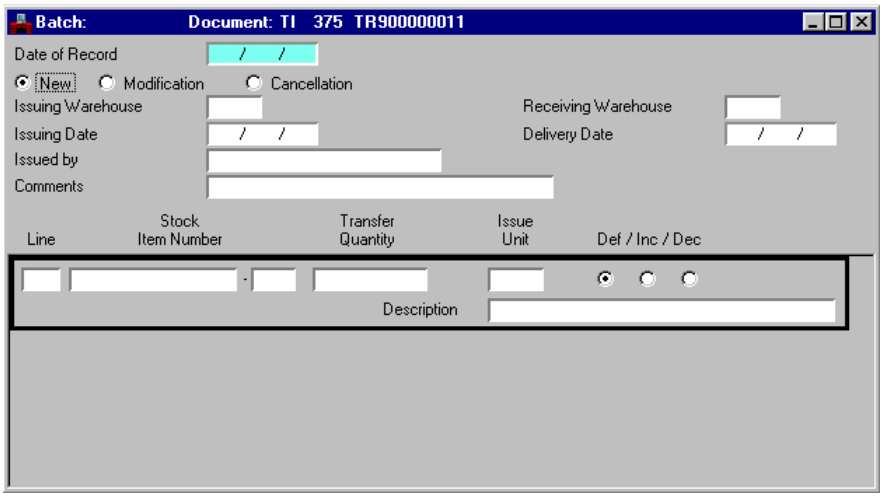
View Updated Tables

OSRC/OSRI/OSRR – Use the steps learned earlier to view information about your SR and SN on the open item tables.

Stock Transfer Issue (TI)

The Stock Transfer Issue document (TI) is the first step in transferring stock items from one warehouse to another. When a TI is processed, it reserves a specific quantity of items for transfer. The transfer is completed when the corresponding Stock Transfer Receipt document (TR) is processed. The TI document has no accounting effects.

Stock Transfer Issue Document (TI)

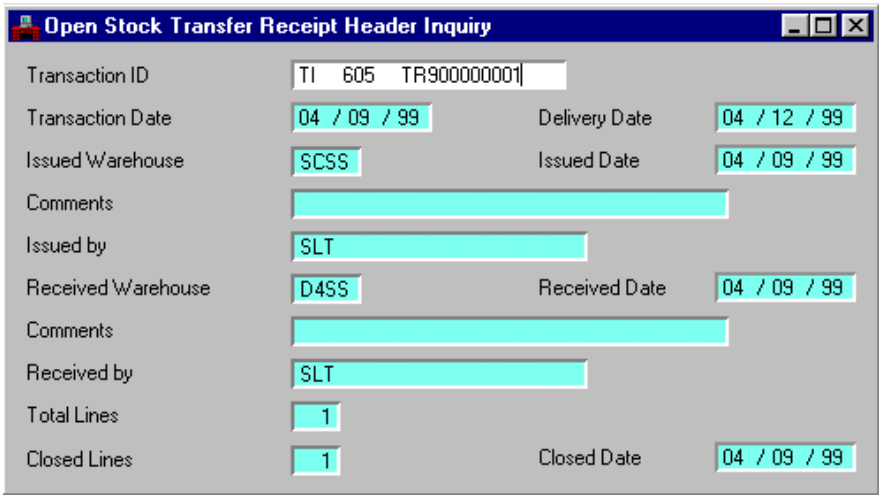


Updated Inquiry Tables

The following commonly used inquiry tables are updated when TI document is accepted into the system:

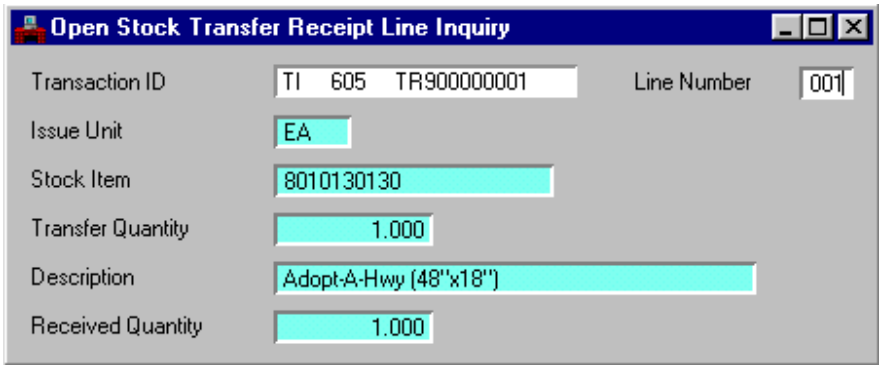
- Open Stock Transfer Header Inquiry (OTRH)
- Open Stock Transfer Line Inquiry (OTRL)
- Inventory Inquiry (1 of 3) (INVN)

Open Transfer Header Inquiry (OTRH)



When a TI is accepted by the system, a record is created on OTRH with information from the header portion of the document.

Open Transfer Line Inquiry (OTRL)



When a TI is accepted by the system, a record is created on OTRL for each item line of the document. The *Received Quantity* field will be blank until the corresponding Stock Transfer Receipt document (TR) is processed.

INVN – In addition to the above, processing a TI will update the *In Transfer* and *Available* fields by the amount being transferred.

Exercise #8: Transfer Issue

Scenario:

The warehouse manager of Warehouse CW02 needs 100 boxes of pencils from Warehouse CW01. The warehouse manager of Warehouse CW01 must enter a TI to release the items from the warehouse.

Complete the following exercise:

The first few steps to create a TI are identical to those you follow to create any document:

Step 1. From the ***Inventory*** Business Area, open the **Stock Transfer** Business Function.

Step 2. Click on the **TI** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Stock Transfer Issue*** automatically selected in the *Document Type* field.

Step 3. Enter ***375*** (the agency) in the first section of the *Document ID* and the prefix ***TR*** in the second section.

Step 4. Select ***Automatic Document Numbering***. This feature allows the system to automatically number your documents sequentially.

Step 5. Select **OK**. The TI appears. The document ID is displayed in the title bar of the window. Write the complete Document ID here:

_____.

Step 6. Enter the following information:

*Issuing Warehouse**:*** ***CW01***
Receiving Warehouse: ***CW02***
Issuing Date: ***Enter today's date***
Delivery Date: ***Enter today's date***
*Issued by**:*** ***Enter your name***
Line: ***001***
Stock Item Number: ***62060020002***
Transfer Quantity: ***100***

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 3. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted (***ACCPT***) status.

Step 4. Select **Yes** in the dialogue box that appears to close the document.

View Updated Tables

OTRH/OTRL – Use the steps learned earlier to view information about your Transfer on the open item tables. You may do this from the Stock Transfer Business Function, which should still be open.

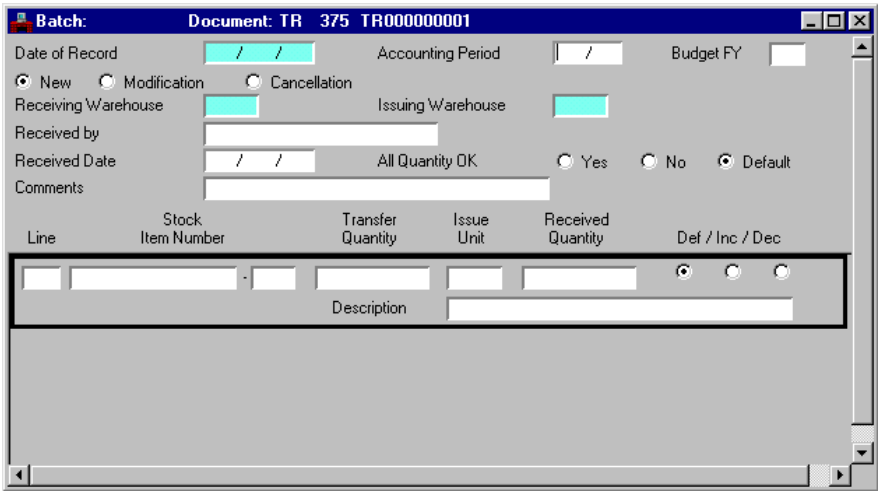
Stock Transfer Receipt (TR)

The Stock Transfer Receipt document (TR) is the second step in transferring stock items from one warehouse to another. The TR confirms that the transfer quantity actually arrived into the receiving warehouse. **Since no reference transaction field exists on a TR, the TR document ID must be the same as the Stock Transfer Issue (TI) that it is receiving.**

If the whole transfer is correct, you only need to enter the appropriate data in the *Received By* and *Received Date* fields, and select the ***Yes*** radio button in the *All Quantity OK* field. The balance of the information, item lines included, will be inferred from the open transfer tables.

If all the quantities were not correct, you must enter each item line and the actual received quantity. The stock item number, description, and original transfer quantity will be inferred from the open transfer tables.

Stock Transfer Receipt Document (TR)



Updated Inquiry Tables

The following commonly used inquiry tables are updated when a TR document is accepted into the system.

- Open Transfer Header Inquiry (OTRH)
- Open Transfer Line Inquiry (OTRL)
- Inventory Inquiry (1 of 3) (INVN)

OTRH – When a TR is accepted by the system, the following fields are updated on OTRH: *Received By*, *Received Date*, *Comments*, *Closed Date*, and *Closed Lines*.

OTRL – When a TR is accepted by the system, the *Received Quantity* field is updated on OTRL.

Note: When browsing OTRH and OTRL, always use ***TI*** as the document type (not ***TR***).

INVN – The INVN record for each warehouse (issuing and receiving) is updated for each item line of an accepted TR. For the issue warehouse's inventory record, the *In Transfer* and *On Hand* fields are decreased by the actual quantity received, and the *Extended Cost* field is decreased by the cost of these items. For the receiving warehouse's inventory record, the *On Hand* field is increased by the quantity received and the *Extended Cost* field is increased by the cost of those goods.

Exercise #9: Transfer Receipt

Scenario:

The warehouse manager of Warehouse CW01 processed a TI to release 100 boxes of pencils for transfer. The warehouse manager of Warehouse CW02 must record the receipt of the stock items by entering a TR.

Complete the following exercise:

The first few steps to create a TR are identical to those you follow to create any document:

Step 1. From the ***Inventory*** Business Area, open the **Stock Transfer** Business Function.

Step 2. Click on the **TR** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Stock Transfer Receipt*** automatically selected in the *Document Type* field.

Step 3. Enter ***375*** (the agency) in the first section of the *Document ID*.

Step 4. Enter the document number you wrote down for your TI. The TR number **must** be identical to the TI number.

Step 5. Select **OK**. The TR appears.

Step 6. Enter the following information:

Received by: ***Enter your name***
Received Date: ***Enter today's date***
Line: ***001***
Received Quantity: ***100***

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 3. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted (***ACCPT***) status.

Step 4. Select **Yes** in the dialogue box that appears to close the document.

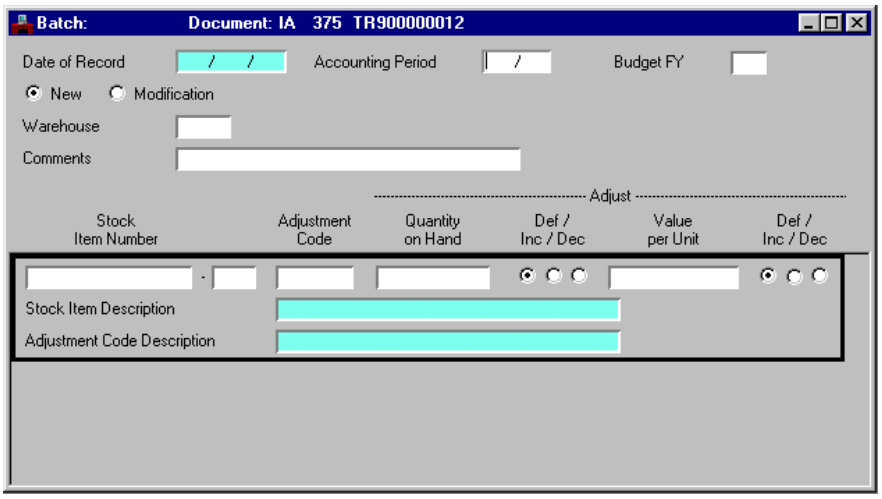
View Updated Tables

OTRH/OTRL – Use the steps learned earlier to view information about your Transfer on the open item tables. You may do this from the Stock Transfer Business Function, which should still be open. Be sure to browse these tables using the ***TI*** document type (not ***TR***).

Inventory Adjustment (IA)

The Inventory Adjustment document (IA) is very useful for managing physical inventory. The IA allows the user to adjust the on-hand quantity or value per unit of a stock item in inventory. All adjustments done with the IA document are classified by an adjustment code, defined on the Adjustment Code tables (ADJC). An IA will be used when entering new stock items into the inventory system that do not have a corresponding outstanding (i.e. not received) purchase order.

Inventory Adjustment Document (IA)



Updated Inquiry Tables

The following commonly used inquiry tables are updated when an IA document is accepted into the system:

- Inventory Inquiry (1 of 3) (INVN)

INVN – If the IA is being used to adjust the on-hand quantity of a stock item, the *On Hand* and *Extended Cost* fields on INVN are updated, reflecting the amount of the adjustment. If the IA is being used to adjust the value per unit of a stock item, the *Extended Cost* and *Unit Price* fields are updated on INVN.

Exercise #10: Inventory Adjustment

Scenario:

You are the warehouse manager Warehouse CW01. You have found nine boxes of binder clips in an overflow bin in your warehouse. Since they were thought to be lost or stolen, they were already written off. You need to put them back into inventory with an Inventory Adjustment (IA) document.

Step 1. From the ***Inventory*** Business Area, open **Inventory Adjustment** Business Function.

Step 2. Click on the **IA** button at the bottom of the Business Function window. The Batch/Document Entry window appears with the ***Physical Inventory Adjustment*** automatically selected in the *Document Type* field.

Step 3. Enter ***375*** (the agency) in the first section of the *Document ID* and the prefix ***TR*** in the second section.

Step 4. Select ***Automatic Document Numbering***. This feature allows the system to automatically number your documents sequentially.

Step 5. Select **OK**. The IA appears. The document ID is displayed in the title bar of the window. Write the complete Document ID here:

_____.

Step 6. Enter the following information:

Warehouse: ***CW01***
Comments: ***Found lost items***
Stock Item Number: ***61567040004***
Adjustment Code: ***NEWADD***
Quantity on Hand: ***9***

Step 7. Select the ***Inc*** (increase) radio button (the middle one) after the *Quantity on Hand* field.

This tells the system that we are increasing the on hand quantity by 9.

Process the Document

The steps to process a document are always the same:

Step 1. Edit the document by selecting **Process: Edit**.

You should receive the message "READY FOR APPROVAL 1".

Step 2. Select **Process: Approve** to apply approval to the document. You should receive the message "APPROVAL 1 APPLIED".

Step 3. Process the document by selecting **Process: Run**.

Once you have run your document, it is processed. The system updates all the related tables and ledgers, and the document is listed with an Accepted (***ACCPT***) status.

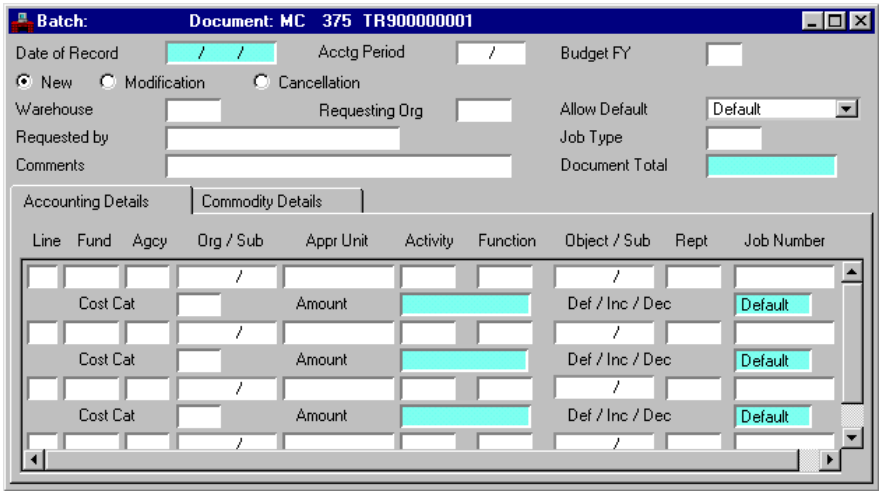
Step 4. Select **Yes** in the dialogue box that appears to close the document.

Step 5. Click on the **Close** button at the bottom of the window to close the Business Function.

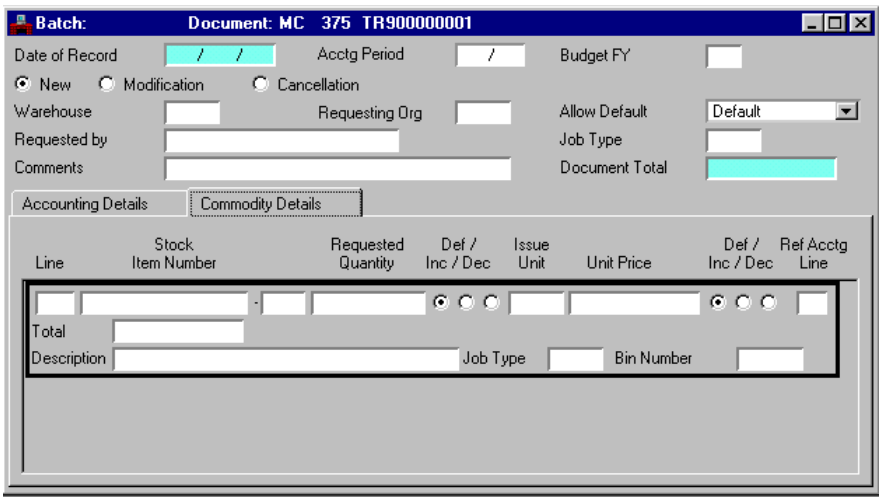
Manufacturing Over the Counter (MC)

The Manufacturing Over the Counter document (MC) is used to record consumption from inventory of raw materials used to manufacture a new inventory item. Manufactured items are goods that are assembled by using raw materials already housed in warehouse inventory, and combined to create new, manufactured stock items. An example would be taking empty bags and bulk sand (raw materials) from a warehouse and combining them, replacing them with a new stock item called sandbags (manufactured stock item).

Accounting Details



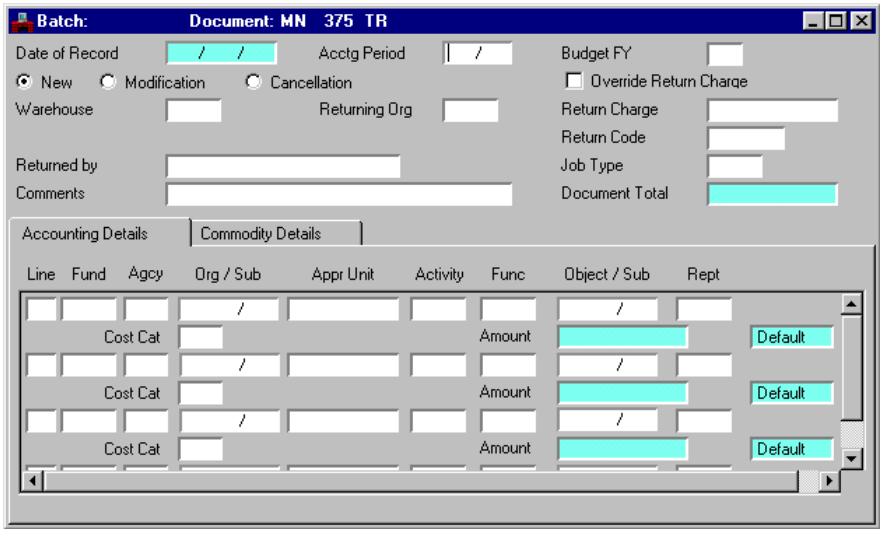
Commodity Details



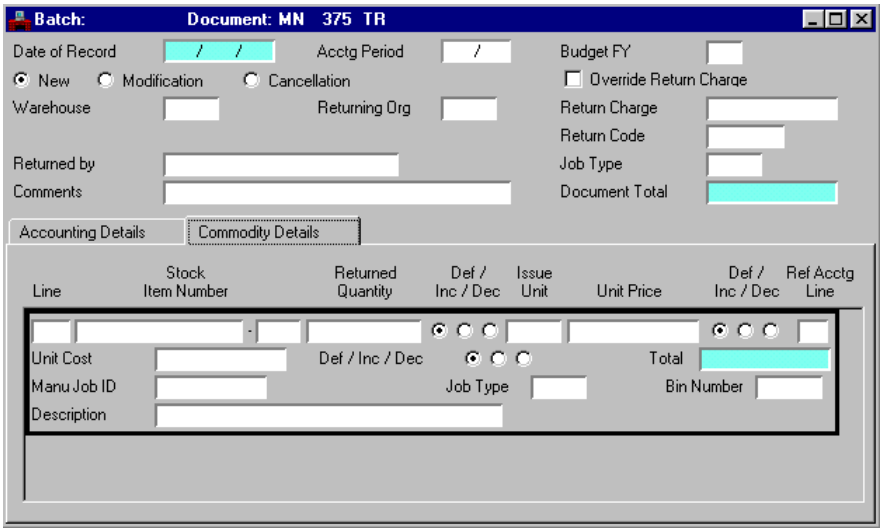
Manufactured Items Receipt (MN)

The Manufactured Items Receipt document (MN) is used to enter newly created stock items back into warehouse inventory. This transaction will update the appropriate Inventory tables and ledgers.

Accounting Details



Commodity Details



Inquiry Screens

Topic Objectives

After completing this topic, you will be able to:

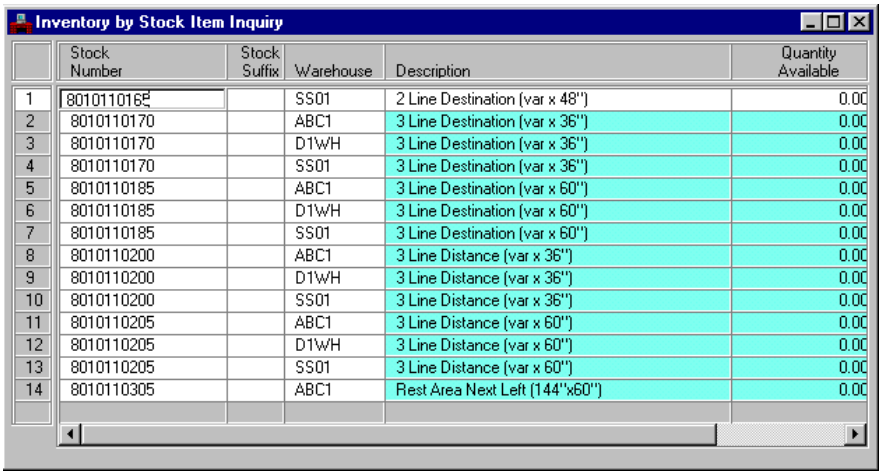
- Identify additional useful inquiry tables in SAM II
- Access different types of inquiry tables in SAM II

Topic Overview

We have already discussed many of the useful inquiry tables related to specific documents in SAM II. This topic introduces you to the following additional useful inquiry tables:

- Inventory by Stock Item Inquiry (INVI)
- Item Group by Stock Item Inquiry (ITMS)
- Keyword by Stock Item Inquiry (KYWD)
- Open Items by Stock Number Inquiry (OISN)
- Warehouse Management Index (WHSE)

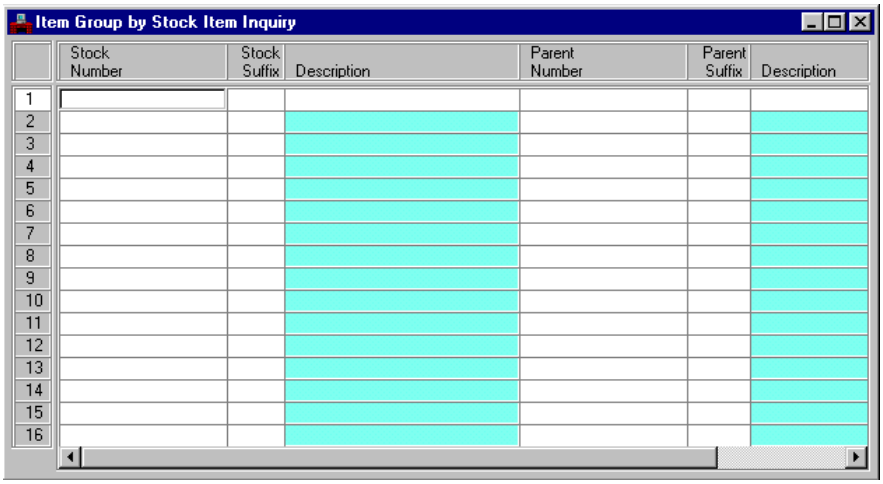
Inventory by Stock Item Inquiry (INVI)



	Stock Number	Stock Suffix	Warehouse	Description	Quantity Available
1	801011016E		SS01	2 Line Destination (var x 48")	0.00
2	8010110170		ABC1	3 Line Destination (var x 36")	0.00
3	8010110170		D1WH	3 Line Destination (var x 36")	0.00
4	8010110170		SS01	3 Line Destination (var x 36")	0.00
5	8010110185		ABC1	3 Line Destination (var x 60")	0.00
6	8010110185		D1WH	3 Line Destination (var x 60")	0.00
7	8010110185		SS01	3 Line Destination (var x 60")	0.00
8	8010110200		ABC1	3 Line Distance (var x 36")	0.00
9	8010110200		D1WH	3 Line Distance (var x 36")	0.00
10	8010110200		SS01	3 Line Distance (var x 36")	0.00
11	8010110205		ABC1	3 Line Distance (var x 60")	0.00
12	8010110205		D1WH	3 Line Distance (var x 60")	0.00
13	8010110205		SS01	3 Line Distance (var x 60")	0.00
14	8010110305		ABC1	Rest Area Next Left (144"x60")	0.00

Inventory by Stock Item Inquiry (INVI) is an alternate view of Inventory Inquiry (INVN). It allows the user to view descriptions and available quantities for stock items.

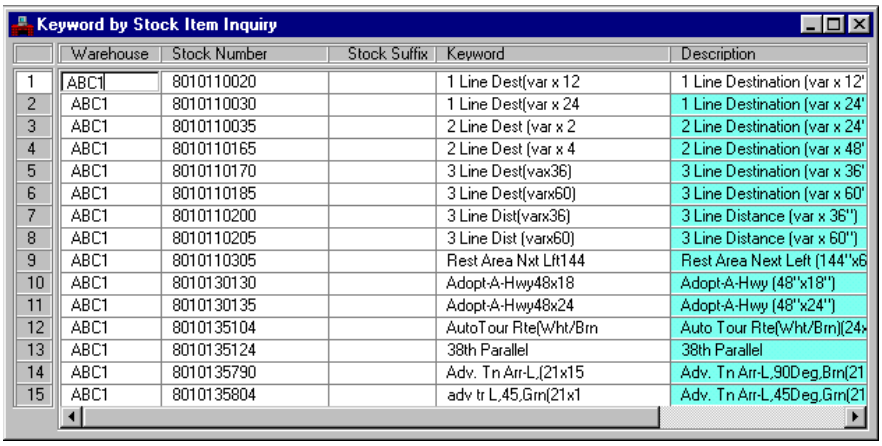
Item Group by Stock Item Inquiry (ITMS)



	Stock Number	Stock Suffix	Description	Parent Number	Parent Suffix	Description
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

Item Group by Stock Item Inquiry (ITMS) is an alternate view of Item Group (ITMG). It allows the user to view parent stock items and child stock items and their respective descriptions and relationships.

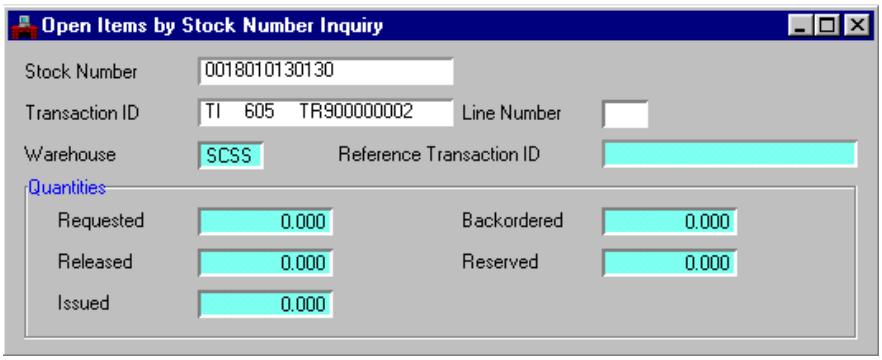
Keyword by Stock Item Inquiry (KYWD)



	Warehouse	Stock Number	Stock Suffix	Keyword	Description
1	ABC1	8010110020		1 Line Dest(var x 12	1 Line Destination (var x 12'
2	ABC1	8010110030		1 Line Dest(var x 24	1 Line Destination (var x 24'
3	ABC1	8010110035		2 Line Dest (var x 2	2 Line Destination (var x 24'
4	ABC1	8010110165		2 Line Dest (var x 4	2 Line Destination (var x 48'
5	ABC1	8010110170		3 Line Dest(vax36)	3 Line Destination (var x 36'
6	ABC1	8010110185		3 Line Dest(varx60)	3 Line Destination (var x 60'
7	ABC1	8010110200		3 Line Dist(varx36)	3 Line Distance (var x 36")
8	ABC1	8010110205		3 Line Dist (varx60)	3 Line Distance (var x 60")
9	ABC1	8010110305		Rest Area Nxt Lft144	Rest Area Next Left (144"x6
10	ABC1	8010130130		Adopt-A-Hwy48x18	Adopt-A-Hwy (48"x18")
11	ABC1	8010130135		Adopt-A-Hwy48x24	Adopt-A-Hwy (48"x24")
12	ABC1	8010135104		AutoTour Rte(Wht/Brn	Auto Tour Rte(Wht/Brn)(24x
13	ABC1	8010135124		38th Parallel	38th Parallel
14	ABC1	8010135790		Adv. Tn Arr-L,(21x15	Adv. Tn Arr-L,90Deg,Brn(21
15	ABC1	8010135804		adv tr L,45,Grn(21x1	Adv. Tn Arr-L,45Deg,Grn(21

Keyword by Stock Item Inquiry (KYWD) is an alternate view of Inventory by Keyword (INKY). It allows the user to look up a stock item's keyword(s) by warehouse.

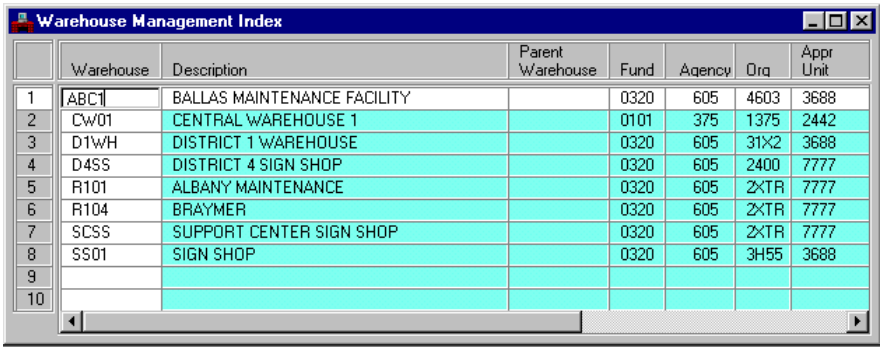
Open Items by Stock Number Inquiry (OISN)



Open Items by Stock Number Inquiry (OISN) provides a means of tracking which transfers and stock requisitions make up the sum total of the amount fields on Inventory Inquiry (INVN). Records are added to this table for each line of an accepted Stock Requisition (SR), Over the Counter (OC), or Stock Transfer Issue (TI) document.

The Quantities fields are inferred from Open Stock Requisition Line Inquiry (OSRC) for SR and OC documents. For the TI document, these fields are inferred from Open Stock Transfer Receipt Line Inquiry (OTRL).

Warehouse Management Index (WHSE)



	Warehouse	Description	Parent Warehouse	Fund	Agency	Org	Appr Unit
1	ABC1	BALLAS MAINTENANCE FACILITY		0320	605	4603	3688
2	CW01	CENTRAL WAREHOUSE 1		0101	375	1375	2442
3	D1WH	DISTRICT 1 WAREHOUSE		0320	605	31X2	3688
4	D4SS	DISTRICT 4 SIGN SHOP		0320	605	2400	7777
5	R101	ALBANY MAINTENANCE		0320	605	2XTR	7777
6	R104	BRAYMER		0320	605	2XTR	7777
7	SCSS	SUPPORT CENTER SIGN SHOP		0320	605	2XTR	7777
8	SS01	SIGN SHOP		0320	605	3H55	3688
9							
10							

Warehouse Management Index (WHSE) is an index view of the various warehouses defined in the system.

Batch Processes

Topic Objectives

After completing this topic, you will:

- Understand the Batch Processes that enable the system to control backordering, physical inventory, forecast and reordering, and inventory replenishment

Topic Overview

This topic introduces you to the following processes:

- Backorder Servicing
- Inventory Freeze Process
- Inventory Reconciliation Posting
- Forecast Usage
- Lead Time Calculation
- Reorder Level and Reorder Quantity Calculation
- Replenishment Review Report
- Autogeneration of RX and PG documents from IREP

Backorder Servicing

Backorder servicing attempts to fill backordered quantities of open Stock Requisitions (SR). The *Backorder Servicing* job (AFININBS) executes a program (INBS) which reads through the Open Stock Requisition Header Inquiry table (OSRH) and selects all records that have a *Backordered* status of ***Partially*** or ***Fully***. Selected SR's are filled in delivery date order, with partial backorders filled before full backorders.

For each of the selected SR's, the *Backordered* quantity of each stock item is compared to the *Available* quantity on Inventory Inquiry (INVN). If the *Available* quantity is greater than zero, then the backorder is filled. SR records that are serviced by the program are then ready for the Pick and Issue process.

Note: If the *Ship Whole Order* indicator is selected on OSRH, and the quantity is insufficient to fill the backorder, the requisition will not be filled.

Inventory Table Updates

The following tables are updated by the *Backorder Servicing* job:

- Inventory Inquiry (1 of 3) (INVN)
- Open Stock Requisition Line Inquiry (OSRC)
- Open Stock Requisition Header Inquiry (OSRH)
- Issue Queue (ISSQ)

On both INVN and OSRC, the *Backordered* quantity is decreased and the *Reserved* quantity is increased by the quantity serviced. On OSRH, the appropriate status fields are updated (i.e., if the requisition is completely filled, the *Backordered* status is set to ***None***). Finally, whenever a backorder is serviced, a record is added to ISSQ.

Physical Inventory Introduction

Managing physical inventory is one of the most important responsibilities of an inventory manager. Since accurate inventory records are essential for maintaining inventory, periodic physical inventory counts must be done. Inventory counts are done in SAM II using two off-line jobs. The first, *Inventory Freeze*, "freezes" selected stock items in a warehouse, preventing these items from being issued. While frozen, these items are counted manually, and the actual quantities are entered into the system. The second job, *Inventory Reconciliation Posting*, updates the system with the actual quantities entered.

Inventory Freeze Process

The first step in doing a physical inventory count is to run the *Inventory Freeze* job (AFININIF). This job executes a program (INIF) which loads selected records from Inventory Inquiry (INVN) onto the Physical Inventory Freeze table (INVF).

Physical Inventory Freeze (INVF)

Three options are available when selecting items to be frozen: freezing an entire warehouse, freezing a specific stock group (or groups) within a warehouse, and freezing a range of bins. The selection criteria are stored on the Application Dates table (LDAT). For more information about LDAT parameters, refer to the *System Administration Guide for Subsystems*.

As a stock item is selected for the physical freeze, the ***Frozen as Posted*** indicator on INVN is selected for that record. While frozen, stock items cannot be received into (RC) or issued (SR, OC) from the warehouse. Frozen items can be reserved (SR) and released (PI).

The last action of the INIF program is to generate the Inventory Freeze Report (INIF). The Inventory Freeze Report is used as a "count sheet", when doing the actual count in the warehouse. The report lists all bin locations that should be counted during the freeze. The *Actual Quantity* fields on the report are left blank, and should be filled in by the individual performing the count.

After the inventory count has been done, the actual quantities (from the Inventory Freeze Report) are entered into each stock item's *Actual Quantity* field on INVF. When this has been done, the next step is to identify any discrepancies between the actual counts and the *On-Hand* quantities on INVN.

The Physical Inventory Discrepancy Report (IN70) should be printed. The IN70 report displays all discrepancies for a given count and warehouse. The printed IN70 is used as an audit trail for each count.

If necessary, the inventory manager may do a recount, based on the discrepancy information. After a recount, corrections will be made to the INVF records (if needed), and the IN70 report should be printed again. This process should be repeated until the inventory manager is satisfied with the discrepancies.

Inventory Reconciliation Process

After the final discrepancy adjustments are made to INVF, the *Inventory Reconciliation Posting* job (AFININRP) is ran, completing the physical inventory count process. This job executes a program (INRP) which reads all records on INVF and updates INVN for each stock item. For each record, the *On Hand*, *Last Count*, and *Extended Cost* fields on INVN are updated with the *Actual Quantity* information from INVF. The ***Frozen as Posted*** indicator is deselected and the system date is stored in the *Last Counted* date field. The final action of the INRP program is deleting the records for the inventory count from INVF.

Forecast and Reordering Introduction

Another key component to managing inventory properly is a smooth reorder routine. SAM II offers a comprehensive forecasting and reordering process, from calculating lead times to generating documents for warehouse replenishment. Forecast, lead time, and reorder calculations are done using a series of off-line jobs, performed in sequence, at the end of each month. Parameters for forecasting and reordering are defined on the ABC Classification Parameter table (ABCP), discussed later in this section.

The first two jobs, *Forecast Usage* (AFININFC) and *Lead Time Calculation* (AFININLT), can be ran in any order. The *Forecast Usage* job calculates and updates the forecasted demand for a stock item, based on the previous demand. The *Lead Time Calculation* job calculates lead times for requisition processing (length of time elapsed between processing a requisition and processing a corresponding purchase order) and vendor response (length of time elapsed between processing the purchase order and receiving the goods).

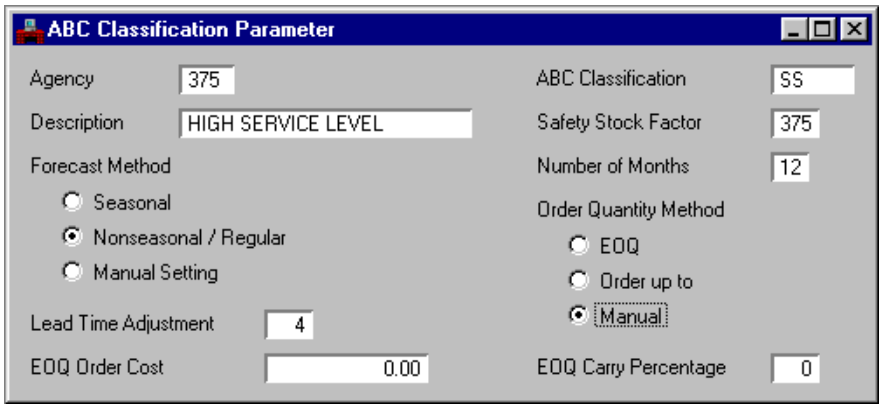
The next step in calculating reorder information is running the *Reorder Level and Reorder Quantity Calculation* (AFININRO) job. This job can only be ran *after* the *Forecast Usage* and *Lead Time Calculation* jobs have been ran. The job calculates the safety stock quantity, reorder level, and reorder quantity for each stock item on INVN that is not marked for manual calculation.

After the reorder calculations have been done, the *Replenishment Review Report* (AFININ90) job can be ran. This job gives a detailed account of reorder quantity and how it is derived for each stock item within a warehouse, in report form. In addition, the job selects stock items that have reached their reorder levels and loads them onto the Inventory Replenishment table (IREP).

The final step in the reorder process is running the *Autogeneration of RX and PG Documents from Inventory Replenishment Table* (AFININRE) job. This job generates Purchase Requisitions (RX) and Price Agreement Releases (PG) based on the entries that were loaded onto IREP during the AFININ90 job.

Each of the above jobs will be discussed in detail in the following pages. For more information on off-line jobs in SAM II, refer to the *System Administration Guide for Subsystems*.

ABC Classification Parameter Table (ABCP)



ABCP is used to set management parameters (i.e. forecast methods and order quantity methods) for stock items with similar management needs. Multiple ABC classifications can be defined for each agency (department). Whenever a stock item is entered in SAM II, it must have a valid ABC class associated with it. When the forecast and reordering jobs are run, calculations will be done based on the information stored on ABCP.

Forecast Usage (AFININFC)

The *Forecast Usage* job calculates and updates the forecast demand for each stock item based on previous demand. AFININFC executes a program (INFC) which reads current data from the Inventory Inquiry table (INVN) and calculates the forecasted demand for each stock item according to the specified parameters. Inventory Inquiry (2 of 3) (INV2) is then updated with the forecasted demand. AFININFC should be run at the end of every month.

Three methods are available in SAM II to forecast demand: ***Manual Setting***, ***Non-seasonal/Regular***, and ***Seasonal***. The method used for an item's demand is stored in the ABC Classification Parameter table (ABCP).

Manual Forecast

If inventory managers wish to perform a more detailed analysis of an item's usage, a manual forecasting method can be used. Forecast information can be entered directly onto Inventory Inquiry (2 of 3) (INV2) when using this method, and will be carried forward in later reorder amount calculations and on reports.

Non-Seasonal Demand (Regular)

Non-seasonal monthly product demand is forecasted as the moving monthly average of the actual demand in the previous months. The number of months to use in the calculation is specified on ABCP. The actual demand history is retrieved from Inventory Inquiry (2 of 3) (INV2).

Seasonal Demand

Seasonal monthly demand is forecasted as the product of the average demand during the previous months and the seasonal factor for the current period. Again, the number of months to use in the calculation is specified on ABCP, and the demand history is retrieved from INV2. The seasonal factor is calculated by the system.

Inventory Table Updates

Once the forecasted demand for the specified month is calculated, the *Current Year Forecast Quantity* for the appropriate month is updated on INV2.

Other Information

If desired, the *Forecasted Demand and Actual Item Usage History Report* (IN30) can be run after the AFININFC job is complete. IN30 shows forecasted demand and actual usage for a given stock item within a warehouse, by month.

Calculations will be skipped for those items that have not been received for the first time (i.e., the *First Receipt* date field on INVN is blank), since these items have no history data.

Calculations will be skipped for those items with the forecasting method set to ***Manual*** on ABCP.

History data on INV2 must be available for the number of months required on ABCP. In addition, INFC retrieves a forecast month parameter that must be set on the Application Dates table (LDAT). For more information on LDAT, refer to the *System Administration Guide for Subsystems*.

Lead Time Calculation (AFININLT)

The *Lead Time Calculation* job (AFININLT) calculates projected lead times for requisition processing and vendor response. AFININLT executes a program (INLT) which reads the Commodity Ledger and calculates the lead times of each stock item based on the date of the requisition, the related purchase order, and

the receiver transaction. AFININLT should be run at the end of each month.

Inventory Table Updates

As the lead times for each item are calculated, they update the lead time fields Inventory Inquiry (2 of 3) (INV2). All lead time calculations are rounded to the nearest whole number and expressed as "number of days".

Other Information

If desired, the *Lead Time Report* (IN60) can be run after the AFININLT job is complete. IN60 provides an account of the total average lead time expected when ordering and purchasing stock items.

If either requisitions or purchase orders for a stock item are missing, requisition lead time will not be calculated. If either purchase orders or receivers for a stock item are missing, vendor lead time will not be calculated. If these fields are not calculated they will be blank on INV2 and represented by asterisks on the IN60 report.

Stock items with the ***Manual Reorder*** indicator selected on INV2 will not be updated.

History data on the Commodity Ledger must be available for the number of alternate orders required on the Warehouse Management table (WHS2).

Reorder Level and Reorder Quantity Calculation (AFININRO)

The *Reorder Level and Reorder Quantity Calculation* job (AFININRO) calculates safety stock quantity and reorder level for each record in INVN that does not have the ***Manual Reorder*** indicator selected (on INV2). AFININRO executes a program (INRO) which reads the Inventory table and makes the calculations based on the specified parameters (from ABCP) and the forecasting and lead time information produced by the AFININFC and AFININLT jobs. AFININRO should be run at the end of each month, *after* AFININFC and AFININLT.

Three methods are available in SAM II for calculating the reorder quantity: ***EOQ*** (Economic Order Quantity), ***Order-Up-To***, or ***Manual***. The method used for an item's reorder quantity is stored on ABCP.

EOQ (Economic Order Quantity) Method

This method is used to balance inventory carrying costs against order costs. The EOQ method minimizes these costs as much as possible while still maintaining sufficient inventory to fill requests. It is used most effectively for items that are costly, need close control, and have short review periods.

Note: If using the ***EOQ*** method, there must be an *EOQ Order Cost Amount* and an *EOQ Carry Percentage* entered on ABCP.

Order-Up-To Quantity Method

When using the ***Order-Up-To*** method to determine reorder quantity, SAM II will make calculations based on the *Order Up To Quantity* amount that was entered on INV2. This amount is the maximum level the inventory of that item should reach. For example, if the *Order Up To Quantity* on INV2 for a stock item is 30, and the quantity currently available is 5, AFININRO will produce an order quantity of 25.

Manual Method

This method is used when inventory managers want to perform their own analysis. When using this method, users can manually enter a reorder level for the stock item on INV2.

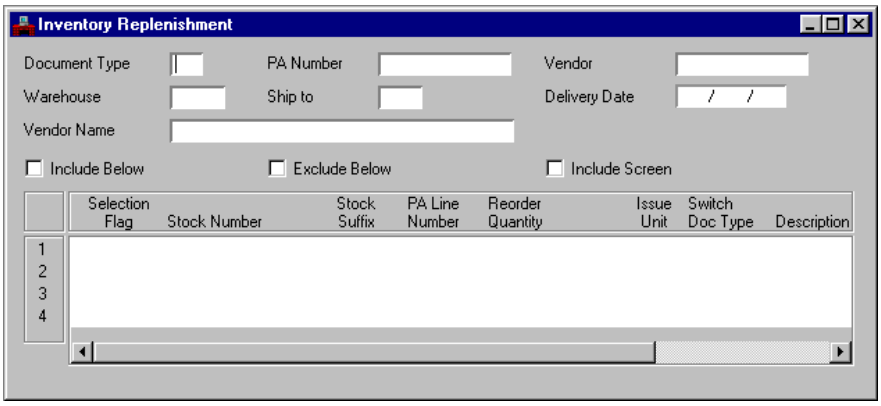
Inventory Table Updates

Once INRO is processed and all calculations are complete, the *Reorder Level* and *Safety Stock Quantity* fields are updated.

Replenishment Review Report (AFININ90)

The *Replenishment Review Report* job (AFININ90) is the first step in automatic inventory replenishment. AFININ90 produces a report (IN90) which shows items ready for reorder and suggested quantities. AFININ90 executes a program (IN90) which, in addition to producing the IN90 report, checks existing stock levels and loads the Inventory Replenishment table (IREP) with items that have reached established reorder points.

Inventory Replenishment (IREP)



When AFININ90 has been completed, the records loaded on IREP are ready for review. At this time, inventory managers review the IN90 report and may make changes accordingly on IREP, such as vendor, reorder quantity, and document type. IREP is also used to select records for the final step in the replenishment process. To select a record for replenishment, use the *Selection Flag* fields. If the *Include Below* indicator is selected, marking the *Selection Flag* selects that record and all records following. If the *Exclude Below* indicator is selected, marking the *Selection Flag* includes the selected record and all subsequent records are excluded. If the *Include Screen* indicator is selected, all records currently visible are selected.

Autogeneration of RX and PG Documents from IREP (AFININRE)

The final step in the replenishment process is the *Autogeneration of RX and PG Documents from IREP* job (AFININRE). AFININRE executes a program (INRE) which reads the IREP table for the selected records. For each selected record, INRE adds either a Requisition (RX) or a Price Agreement Release (PG) to the system. Users can update and edit the documents as needed. The INRE program purges the records from IREP after they have been converted to documents.

Reports

Topic Overview

This topic introduces you to the following reports:

- ABC Analysis Report (IN10)
- ABC Classification Report (IN20)
- Forecasted Demand and Actual Item Usage History Report (IN30)
- Inventory Management Report (IN40)
- Inventory Price List (IN50)
- Stock Movement Report (IN51)
- Lead Time Report (IN60)
- Physical Inventory Discrepancy Report (IN70)
- Inventory Pick and Issue Order (IN80)
- Replenishment Review Report (IN90)

Commonly Used Inventory Control Reports

Code	Report Name	Description
IN10	ABC Analysis Report	This report shows annual usage and dollar volume of stock items by current ABC groupings. It also details the stock item descriptions, issue units, and average unit cost. The ABC analysis report is useful in determining the most reasonable ABC grouping for a stock item according to annual usage and dollar volume.
IN20	ABC Classification Report	This report provides management with a description of ABC classes currently in use. Each ABC details the following elements: forecast method, number of months back, reorder method, safety stock factor, EOQ order, and EOQ carry percent. These elements are defined in the ABC Classification Parameter (ABCP) table.
IN30	Forecasted Demand and Actual Item Usage History Report	This report shows stock item, forecasted demand, and actual quantity issued on a monthly basis. This first column of data details the forecasted demand for the current year. The second column details the actual usage for the current year. Subsequent columns of data provide a rolling history of actual item usage in past years. This report is useful in performing further analysis of variance, as well as measuring appropriate forecast methods.
IN40	Inventory Management Report	This report, keyed by ABC classification, provides management with a detailed account of each stock item. For each item within the desired ABC class, the following elements are detailed: on-hand quantity, average unit cost, extended cost, safety stock quantity, reorder level, and reorder quantity. The report assists management in making decisions regarding reorder levels and determining whether inventory items are being turned over as frequently as desired.
IN50	Inventory Price List	This report details the unit price of stock items within a particular warehouse under a particular agency. It includes the description and unit of issuance for each stock item listed. This report is useful in performing price variance analysis of stock items as well as forecasting expected revenues by warehouse, agency, or stock item.

IN51	Stock Movement Report	This report provides information about each transaction that affects the on-hand balance of a stock item, or range of stock items, during a specified time period. The details on this report include the buyer account, date, quantity, and extended cost for each accepted transaction that changed the on-hand balance of the stock item. Quantities and extended costs are netted and summarized for each month.
IN60	Lead Time Report	This report provides an account of the total average lead time expected when ordering and purchasing certain stock items. For each stock item, the item description, suggested vendor, and average lead time between issuing the requisition and issuing a purchase order are shown. The report also shows the average vendor lead time between issuing the purchase order and receiving the items from the vendor, the adjusted lead time, and the total average lead time. This report is very useful to management in periods of expected stock shortages and critical reorder requests; it can assist management in selecting a reliable vendor during these critical periods.
IN70	Physical Inventory Discrepancy Report	After the actual counts of inventory items are recorded and entered into the system, a Physical Inventory Discrepancy Report is produced. Organized by agency and warehouse, this report shows the difference between on-hand quantities and actual counts of the items involved in the physical inventory. This report also includes the description, unit cost, issue unit, and the dollar overage or underage adjustment for each stock item involved. If actual quantity is left blank on INVF, the report assumes that the actual quantity is zero and performs the calculations based on that amount.

IN80	Inventory Pick and Issue Order	This report, as used by the warehouse clerk, shows which items are to be picked off inventory shelves and prepared for issuance. To assist the warehouse clerk, stock requisition and issue confirmation identification numbers are provided. Also included are the delivery date, and to whom and where the order is to be delivered. More importantly, this report indicates which items are to be picked, the quantity of these items, where these items are located, and the estimated unit price of the items. A description of each stock item is included along with the quantity of stock items placed in a backordered status. This report is useful in clearing up order and delivery discrepancies that may occur later. The report is automatically printed when processing a PI transaction.
IN90	Replenishment Review Report	This report shows a detailed account of the reorder quantity and how it was derived for each stock item within a warehouse. Along with a description of the stock items, the following elements are included on this report: on-hand quantity, on-order quantity, reorder level, suggested vendor, back order quantity, safety stock quantity, issue unit, reorder this quantity, and purchase unit. This report is useful in analyzing reorder levels and quantities on-hand with safety stock quantities for determining and revising forecasted demands and actual usage.